

EPA Region 5 Records Ctr.



235170

SITE ASSESSMENT REPORT  
FOR  
MOSCHIANO PLATING  
CHICAGO, COOK COUNTY, ILLINOIS  
CERCLIS ID: IL062471081  
TDD: S05-9708-004  
PAN: 7G0401SI

October 8, 1997

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Emergency Response Branch  
77 West Jackson Boulevard  
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## Table of Contents

<u>Section</u>	<u>Page</u>
1 Introduction . . . . .	1-1
2 Site Background . . . . .	2-1
2.1 Site Description . . . . .	2-1
2.2 Site History . . . . .	2-2
3 Site Assessment . . . . .	3-1
4 Analytical Results . . . . .	4-1
5 <i>Discussion of Potential Threats</i> . . . . .	5-1
6 Removal Alternatives/Cost Estimate . . . . .	6-1
 <u>Appendix</u>	 <u>Page</u>
A Photodocumentation . . . . .	A-1
B Analytical Data Package . . . . .	B-1
C RCMS Cost Estimate . . . . .	C-1

## List of Figures

<u>Figure</u>		<u>Page</u>
2-1	Site Location Map . . . . .	2-3
2-2	Site Features Map . . . . .	2-4
3-1	Plating Area # 2 Sample Location Map . . . . .	3-4
3-2	Plating Area # 1 Sample Location Map . . . . .	3-5
3-3	Lacquer Room Sample Location Map . . . . .	3-6

## List of Tables

<u>Table</u>		<u>Page</u>
4-1	Summary of Analytical Results . . . . .	4-2



## **1. Introduction**

The Superfund Technical Assessment and Response Team (START) of Ecology and Environment, Inc. (E & E), was tasked by the Emergency Response Branch (ERB) of the United States Environmental Protection Agency (U.S. EPA) to conduct a site assessment at the Moschiano Plating site in Chicago, Cook County, Illinois under Technical Direction Document (TDD) S05-9804-004. START was tasked to prepare and implement a health and safety plan; compile and review background information; subcontract analytical services; document conditions at the site; conduct air monitoring and multi-media sampling; evaluate threats to human health and the environment; and make recommendations and provide options to U.S. EPA as to the potential need for a removal action, further investigation, referral to other government agencies or U.S. EPA programs, or other actions which may be prudent. The site assessment was performed in accordance with the National Contingency Plan (NCP) in the Code of Federal Regulations (CFR) Section 300.415 to evaluate on-site conditions and possible threats to human health, welfare, and the environment. The site assessment was conducted on August 8, 1997, under the authority of U.S. EPA On-Scene Coordinator (OSC) Reiniero Rivera. This report summarizes START site assessment activities.

## **2. Site Background**

### **2.1 Site Description**

The Moschiano Plating site is located at 2808 West Lake Street, Chicago, Cook County, Illinois (Figure 2-1). The geographical location of the site is N 41°53'20" and W 87°41'90". The property is bordered on the north by a residential area, on the south by Lake Street, on the west by Mozart Avenue, and on the east by a primarily residential building owned by the Holy Temple Church. Directly to the south of Lake Street is an industrial building that contains the National Interchemical Company. There is a Chicago Transit Authority (CTA) elevated train platform located directly above Lake Street that runs parallel to the building. The site is located in an area of mixed industrial and residential development.

The Moschiano Plating site consists of a 60,000-square-foot, one-story brick building. The building contains two plating areas, plating area #1 and plating area #2, a lacquer room, a lacquer spray room, a buffing/polishing room, an office, and various storage areas (Figure 2-2). The plating areas consist of approximately 60 vats, many of which still contain chemicals used during plating operations. The majority of the plating lines are still intact. The floor of the building is constructed primarily of concrete, which is in fair condition. A large amount of miscellaneous debris, including materials associated with plating activities, is scattered about the building. Approximately fifty 55-gallon drums are staged in the eastern portion of the building.

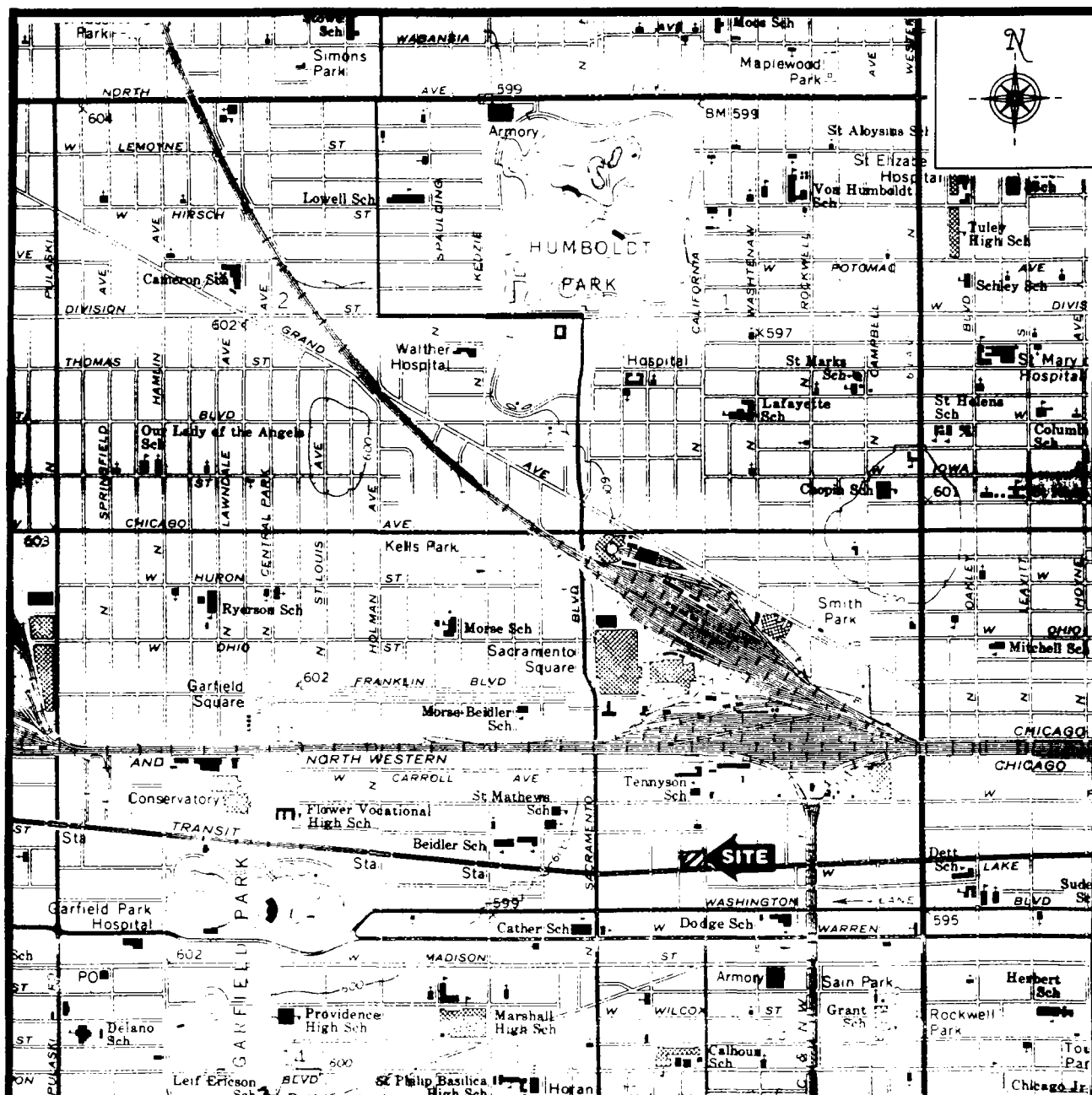
On August 1, 1997, U.S. EPA representative Rey Rivera, and START members Steve Skare and Donovan Robin, were called to the Moschiano Plating site to investigate the conditions in the building. Also present on site were Joe Schusseler, representing the City of Chicago; Greg Yarnik, with the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC); and Jim Clark, with the Illinois Environmental Protection Agency (IEPA). Once START gained access to the site, it was discovered that a section of the roof along the eastern portion of the building had collapsed, breaking pipes connected to the fire suppression system. These pipes were leaking water inside the building. The floor of the main room has significant water accumulation. The collapsed section of the

roof landed on several 55-gallon drums with unknown contents.

## **2.2 Site History**

Moschiano Plating was incorporated in 1972 and moved to the Lake Street location in 1979. According to MWRDGC documents, the company has a long history of discharge violations. Since 1989, Moschiano Plating has been cited for over 50 violations by the MWRDGC. These violations include illegal discharges, Spill Prevention Control and Countermeasure (SPCC) Plan violations, and effluent limits violations. From the time period of November 1, 1995, to December 1, 1996, samples collected by the MWRDGC exhibited elevated concentrations of zinc, copper, nickel, and/or total metals. Moschiano Plating was also fined by the IEPA for violations.

In April 1997, the owner and operator of Moschiano Plating, Frank Moschiano, passed away. At that time, the widow of Frank Moschiano, Josephine Moschiano, ceased the company's operations. On August 1, 1997, when U.S. EPA and START were called to the site due to the roof collapse, it was decided that further actions would be necessary to determine the extent of on-site contamination.



Quadrangle Location



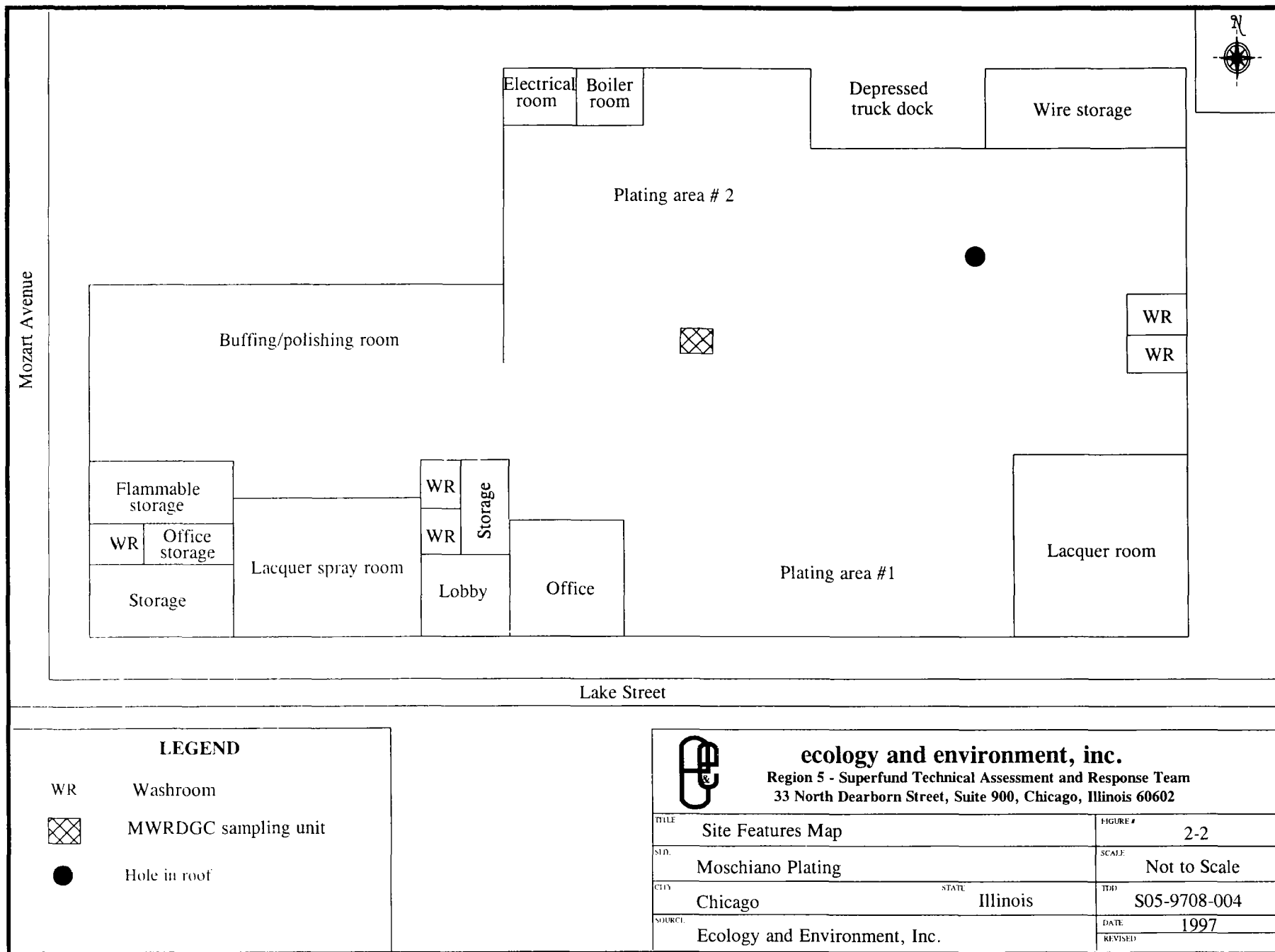
**ecology and environment, inc.**

Superfund Technical Assessment and Response Team

Region 5

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TITLE Site Location Map		FIGURE # 2-1	
SITE Moschiano Plating Facility		SCALE 1:24,000	
CITY Chicago	STATE Illinois	PAN S05-9708-004	
SOURCE USGS 7.5 Minute Topographic Series Chicago Loop Quadrangle, IL		DATE 1962	REVISED 1978



### **3. Site Assessment**

On August 8, 1997, site assessment activities were performed by START members Steve Skare and Stephanie Wenning. All activities were coordinated under the authority of OSC Rivera. Also present at the site were U.S. EPA intern Thomas Cook; MWRDGC representative Manuel Castillo; Pete Badillo with the Chicago Department of the Environment; William Ryczek, an Enforcement Specialist with the Emergency Support Section of the ERB; Christopher Nowotarski, the attorney representing Josephine Moschiano and Dominic Mezino, the former supervisor for the Moschiano Plating operations.

START and U.S. EPA, along with all other representatives present, performed a reconnaissance of the site with the assistance of Mr. Mezino in order to have a better understanding of the facility operations and be able to identify and determine potential risk areas and appropriate sample locations. The following observations were made during the site reconnaissance:

- Air monitoring performed with a photoionization detector (PID) and hydrogen cyanide PACIII Draeger instruments resulted in no readings above background levels.
- The majority of the vats present in Plating area # 1 and Plating area # 2 still contain chemicals used in the plating operations. Access to all the vats in these areas is by wooden catwalk. According to Mr. Mezino, the chemicals in the vats include copper cyanide, brass, nickel, sulfuric acid, nitric acid, and chrome.
- The copper cyanide tank in Plating area # 2 began to leak some time ago and the contents were transferred into five 55-gallon drums by Mr. Mezino.
- The lacquer room, east of the main room, still contained some lacquer and thinner in vats.
- The hole in the roof had worsened since the original site visit on August 1, 1997, and water had continued to accumulate in the main room.
- Drums labeled trichloroethylene (TCE) were present east of Plating area # 1.

- MWRDGC had installed an auto sampling unit at the sewer drain in the main room to monitor the discharges from the facility.

Following the reconnaissance, START and OSC Rivera chose sample locations and analytical parameters. Level B personal protective equipment (PPE) was donned prior to collecting drum samples.

All sample locations are identified in Figures 3-1, 3-2, and 3-3. Liquid samples V-2, V-3, V-4, and V-5 were collected from vats located in Plating area #2. Sample V-1 was a solid crystal collected from the copper cyanide vat in Plating area #2. Sample D-1 was a liquid collected from one of the drums containing material emptied from the leaking copper cyanide tank in Plating area #2. Sample D-2 was a liquid collected from one of the drums located east of Plating area # 2. Samples D-3 and D-4 were liquids collected from vats in the lacquer room. Samples V-6, V-7, V-8, and V-9 were liquids collected from vats located in Plating area # 1. Samples SW-1 and SW-2 were split samples collected by Manuel Castillo from the MWRDGC auto-sampling unit, and sample WL-1 was a brick sample collected from a hole in the exterior of the south building wall. Plating area # 1 is located directly north of this hole.

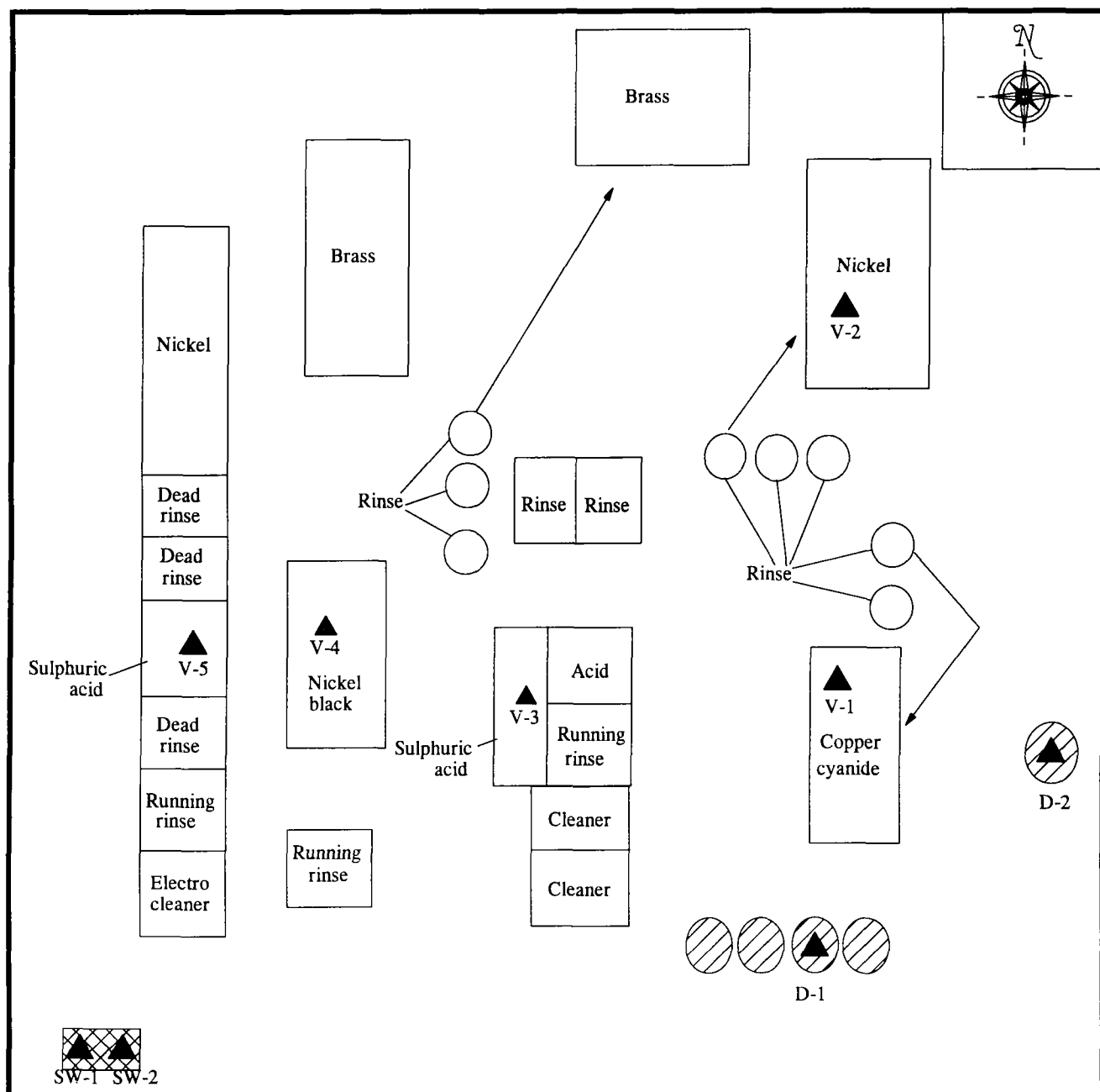
In an attempt to secure the site, OSC Rivera called a contractor for the City of Chicago to secure the front entrance and rear window. Anchor Board-up Company arrived on site and boarded up the inside of the rear window and the exterior of the front entrance.

OSC Rivera requested START personnel return to site the following week to meet with the Emergency Response Contractor Service (ERCS) representative from Environmental Quality Management, Inc. (EQM). The ERCS contractor, EQM, was activated by OSC Rivera because of the emergency situation presented by the unstable condition of the roof, and the need to prevent trespassers access to the site. On August 13, 1997, START member Wenning met on site with OSC Rivera, John Mullane of EQM, Manuel Castillo of MWRDGC, and Greg Healy of Jet-Vac, Inc. (JVI). JVI was contacted by Mullane to stabilize the collapsed section of the roof and further secure the site. During a site reconnaissance, it was discovered that scavengers had entered the building and stolen various metal pipes and fixtures, along with an empty tank from Plating area # 2. It was determined that illegal access to the site had been gained by either climbing through the hole in the roof, or entering through a broken rear window. After the site reconnaissance, Castillo collected water samples from the auto-sampling unit and START received the split sample, SW-2.

During the next two days, August 14 and 15, 1997, employees of JVI supported the collapsing section of the roof with wooden braces, secured the rear window with metal brackets, erected a wooden frame over the hole in the roof and covered it with plastic, and placed razor wire along the





north, east and west perimeter of the building's roof. A metal security door with an industrial lock was also placed on the front entrance. These actions, along with a 24-hour a day security guard from Burns Security, further secured the site.





SW-1 SW-2

### Legend

-  Sample location
-  Drums
-  MWRDGC sampling unit
-  Plating line flow direction

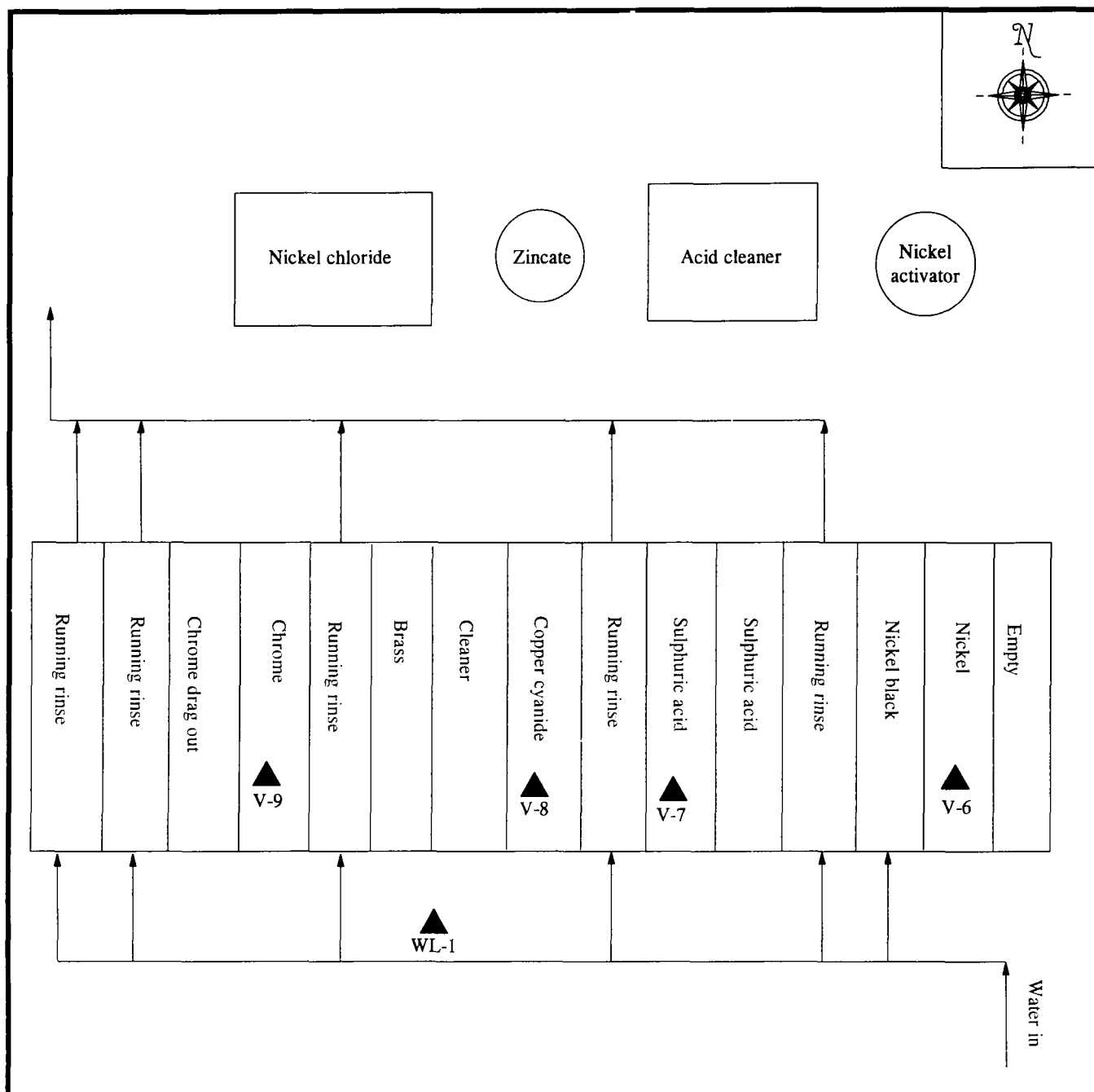


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TITLE	Plating Area # 2 Sample Location Map	FIGURE #	3-1
SITE	Moschiano Plating Facility	SCALE	Not to scale
CITY	Chicago	STATE	Illinois
SOURCE	Ecology & Environment, Inc.	TDD #	S05-9708-004
		DATE	1993
		REVISED	1997



### Legend

- ▲ Sample location
- Plating line flow direction

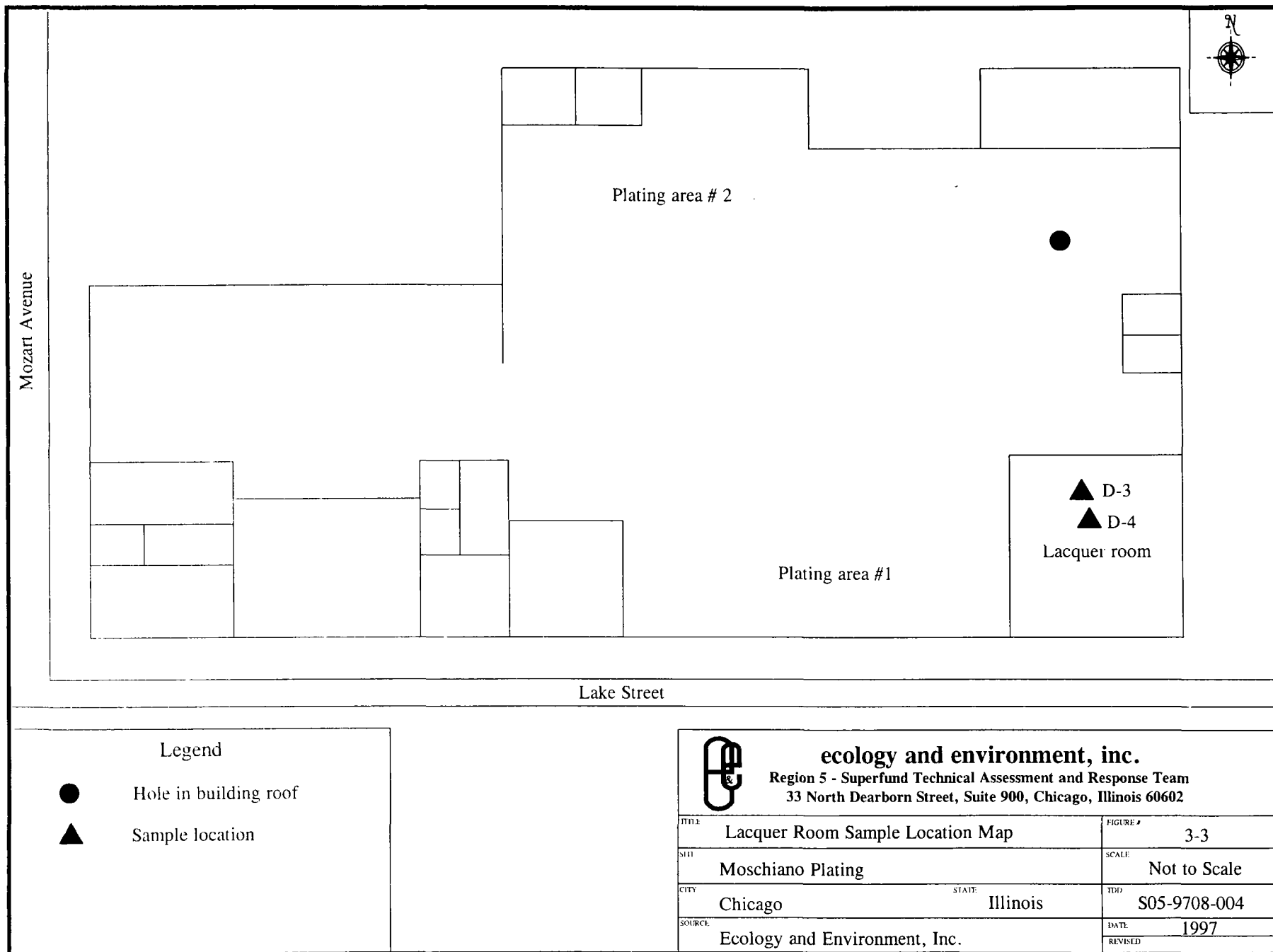


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TITLE	Plating Area #1 Sample Location Map	FIGURE #	3-2
SITE	Moschiano Plating Facility	SCALE	Not to scale
CITY	Chicago	STATE	Illinois
SOURCE	Ecology & Environment, Inc.	TDD #	S05-9708-004
		DATE	1993
		REVISED	1997



#### 4. Analytical Results

Samples V-1 through V-9, D-1, D-2, SW-1, SW-2, and WL-1 were analyzed for total Resource, Conservation, and Recovery Act (RCRA) metals; samples V-1 and WL-1 were analyzed for toxicity characteristic leaching procedure (TCLP) RCRA metals; samples V-1, V-8, D-1, SW-1, SW-2, and WL-1 were analyzed for total and amendable cyanide; samples D-3 and D-4 were analyzed for flash point; samples D-3, D-4, SW-1, and SW-2 were analyzed for total semivolatile organic compounds (SVOCs), and total volatile organic compounds (VOCs); and all samples, except V-1 and WL-1, were analyzed for pH. A Quality Assurance Level II data package, as stated in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01, April 1990, was requested. The samples were analyzed by EIS Analytical Services, South Bend, Indiana, under analytical TDD S05-9708-803. A summary of the analytical results are presented in Table 4-1.

Analytical results of the samples collected at the Moschiano Plating site indicate the wastes exhibit RCRA characteristics for hazardous waste or exhibit elevated levels of hazardous substances. The RCRA hazardous waste criteria (40 CFR 261.22) for corrosivity is any waste material with a pH of less than 2.0 or greater than 12.5 standard units. Samples V-3, V-4, V-5, V-7, and V-9 exhibit pHs of less than 2.0 standard units, and are therefore considered corrosive hazardous wastes. Federal land ban regulations (40 CFR 268.43) restrict disposal of wastewaters containing amenable cyanide equal to or greater than 0.86 milligrams per liter (mg/L), and non-wastewaters with amenable cyanide equal to or greater than 30 mg/L. Analytical results indicated that samples V-1, V-8, and D-1 contained amenable cyanide in levels greater than those allowed. Cyanide was also detected in samples SW-2 and WL-1. Samples D-3 and D-4 contained xylene, toluene, and ethylbenzene. These VOCs are classified as hazardous waste according to 40 CFR 261.31. Xylene and ethylbenzene are classified by RCRA waste code F003, and toluene is classified by waste code F005. Samples SW-1 and SW-2 contained dichloroethene (c-1,2) and trichloroethene. Samples D-3 and D-4 exhibited flash points of 68°F and 66°F, respectively. The characteristic of an ignitable waste, as defined in 40 CFR 261.31, exhibits a flash point of less than 140°F. The flash points for samples D-3 and D-4 are well below this limit, and are therefore considered ignitable. Appendix B contains the analytical data.



Table 4-1 SUMMARY OF ANALYTICAL RESULTS MOSCHIANO PLATING CHICAGO, COOK COUNTY, ILLINOIS August 8, 1997																
Parameter	Sample Designation															
	V-1	V-2	V-3	V-4	V-5	V-6	V-7	V-8	V-9	D-1	D-2	D-3	D-4	SW-1	SW-2	WL-1
Chromium	< 0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.32
Lead	< 0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.05
Mercury	< 0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.001
Selenium	< 2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.05
Silver	0.67	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.01
Semivolatile Organic Compounds																
Bis(2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,330 mg/L	15,100 mg/L	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,030 µg/L	NA	NA
Volatile Organic Compounds																
Ethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28,800 mg/L	14,900 mg/L	NA	NA	NA
1,1,2-Trichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,030 µg/L	10 µg/L	NA
Toluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	165,000 mg/L	145,000 mg/L	NA	NA	NA
Total xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	524,000 mg/L	76,000 mg/L	NA	NA	NA
1,1,1-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,770 µg/L	50 µg/L	NA

Key:

mg/L = milligrams per liter.

mg/kg = milligrams per kilogram.

µg/L = micrograms per liter.

NA = not analyzed.

Source: EIS Analytical Services, South Bend, IN Analytical TDD S05-9708-803.

## 5. Discussion of Potential Threats

Conditions observed during the U.S. EPA investigation of Moschiano Plating that constitute a threat to human health and/or the environment, and may be used to determine the appropriateness of a removal action, as outlined in Section 300.415 (b)(2) of the NCP, included:

- **Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or contaminants.** The potential exists for trespassers to come in contact with the material sampled. Although security measures have been put into place, such measures have only been somewhat successful in deterring vandals. Samples V-3, V-4, V-5, V-7, and V-9 contained materials that are classified as corrosive. Several vats also contained acids used in the plating process. Acids are known to be generally irritating to the skin when touched, and if moisture were to come in contact with the acid, fumes could be liberated which would be irritating to the skin and/or lungs. Ethylbenzene, toluene, and xylene were detected in samples D-3 and D-4. Long-term exposure to ethylbenzene, toluene, and xylene may cause damage to the brain, liver, kidneys, lungs, and blood tissue. It should be noted that not all of the drums were sampled and the hazardous constituents of all the drums were not identified.
- **Actual or potential contamination of drinking water supplies or sensitive ecosystems.** MWRDGC supplied evidence of prior effluent discharge violations by Moschiano Plating. Now that the site is unattended, the potential exists for hazardous materials to leak or spill into the storm sewer.
- **Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.** Approximately 50 drums are located underneath the collapsed section of the building roof. Since the site is currently inactive, the potential for the drums to deteriorate or spill due to weather conditions or vandals exists. As the drums or tanks corrode over time, the potential exists for them to either leak or spill.
- **Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.** The hole in the building roof has previously caused the accumulation of water in the main building. This water will eventually discharge to the storm sewer and may contain unknown contaminants.

- **Threat of fire or explosion.** The materials sampled in the lacquer room, samples D-3 and D-4, have flash points below the RCRA regulatory limit for ignitability of 140°F. These liquids are currently stored in open containers and pose a serious threat of fire or explosion.



## **6. Removal Alternatives/Cost Estimate**

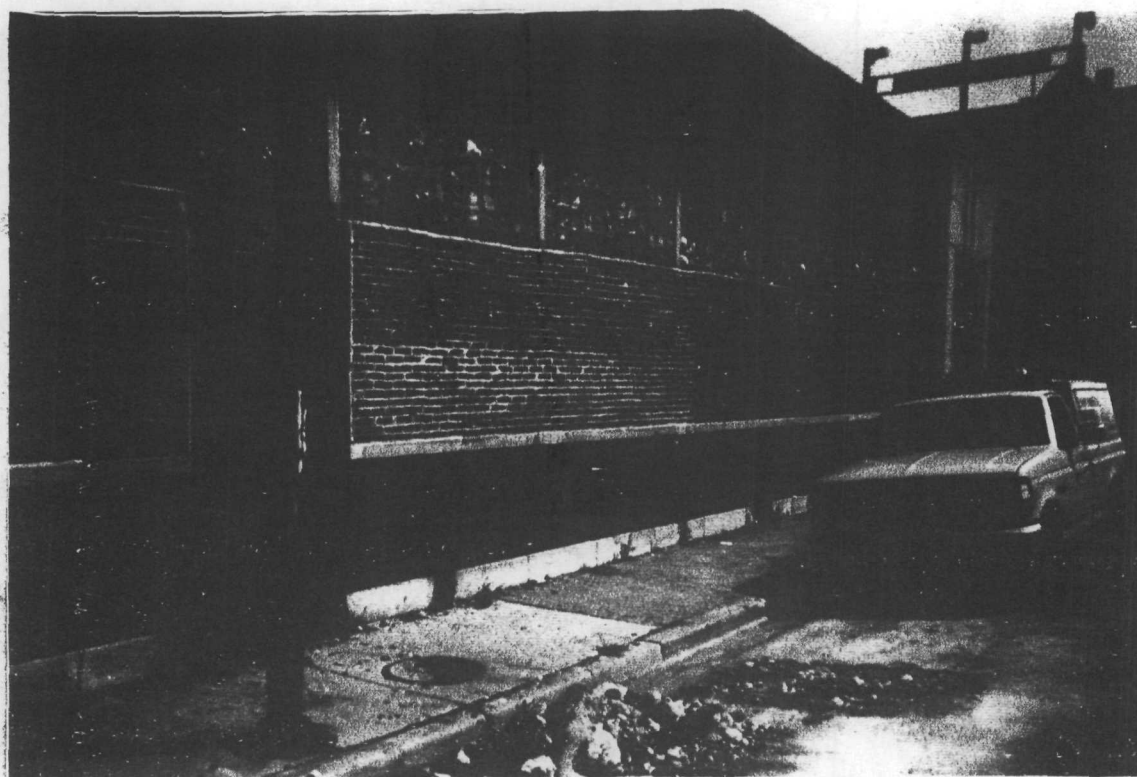
Based upon observations made during the U.S. EPA site assessment, and analytical results from samples collected at the Moschiano Plating site, a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) time-critical removal action is warranted. This removal action should include securing the site, and removing all physical hazards and sources of potential exposure to hazardous materials. The primary focus of the removal action will be to mitigate environmental and health threats resulting from the presence of RCRA hazardous waste. The contents of drums and other containers should be segregated, staged, sampled, and categorized for disposal.

The cleanup cost estimate, calculated using the Removal Cost Management System (RCMS) software program Version 4.2 (Appendix C), includes cleanup contractor and subcontractor, U.S. EPA, and START costs; and totals approximately \$1,086,426. These costs are based upon certain assumptions, described below.

- The site work will be completed in sixty 10-hour days. Two 10-hour days will be necessary for mobilization and demobilization. One hundred 10-hour days have been estimated for the U.S. EPA OSC and one START member. The time budgeted for START includes preparation of a site-specific health and safety plan, as well as a final report upon completion of the removal.
- All cleanup contractor rates for personnel and equipment are those of the ERCS contractor.
- ERCS personnel will consist of one response manager, one foreman, one field clerk, and five laborers. The START contractor will provide one environmental engineer. U.S. EPA will provide one OSC. In addition, for a limited number of days, a chemist and a truck driver will be used on site to help with the categorization and disposal of the wastes.
- A structural engineer will be needed to examine the collapsed section of the building to determine the integrity of the roof and wooden supports.

- A small amount of asbestos, approximately one-cubic-yard box, was identified by the ERCS contractor and will need to be removed and disposed of properly.
- Due to a potential interest in the property, an extent of contamination study may need to be completed prior to the completion of the cleanup. This will involve sampling throughout the building to determine the extent of any contamination remaining in the building. A Geoprobe will be required to sample the soil beneath the concrete floor, and analytical services will be required for the samples collected. It is estimated that 20 samples will be collected using the Geoprobe, and the sampling activities will take no longer than eight 10-hour days.

**Appendix A**  
**Photodocumentation**



**SITE:** Moschiano Plating

**DATE:** August 1, 1997

**TIME:** 15:10

**LOCATION:** Chicago, IL

**DIRECTION:** Southwest

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** West exterior wall of the building. Note the side door.



**SITE:** Moschiano Plating

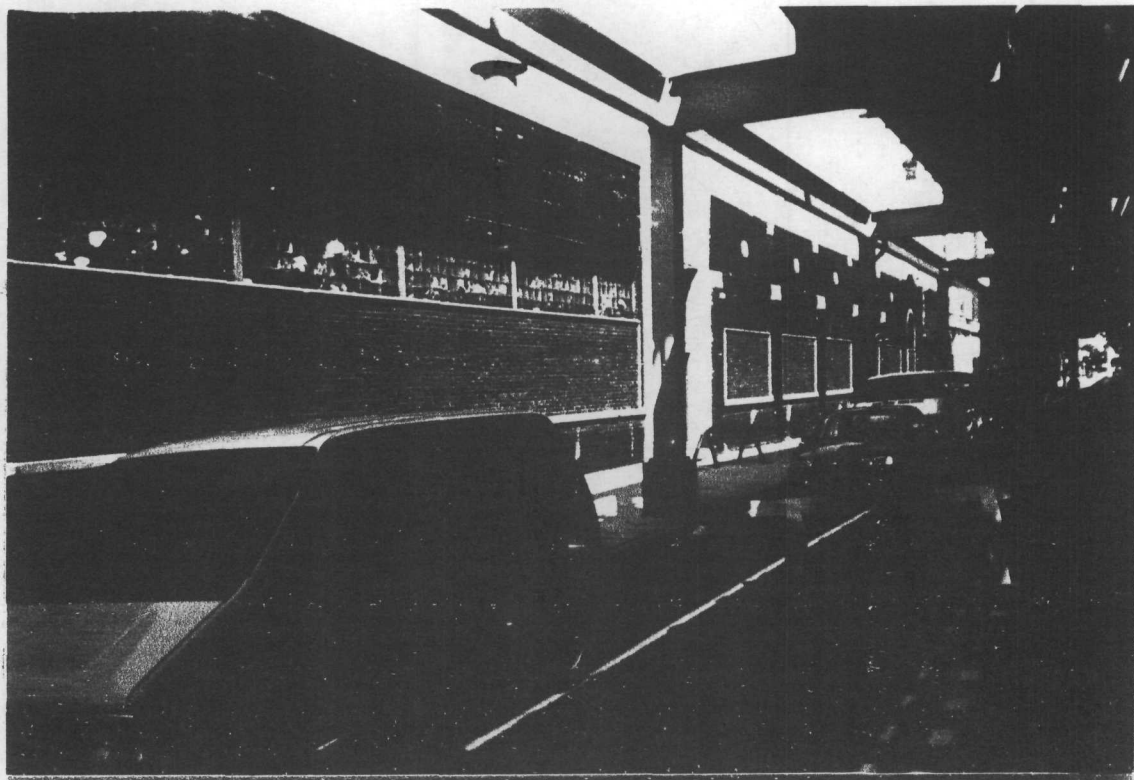
**DATE:** August 1, 1997

**TIME:** 15:10

**LOCATION:** Chicago, IL

**DIRECTION:** Northeast

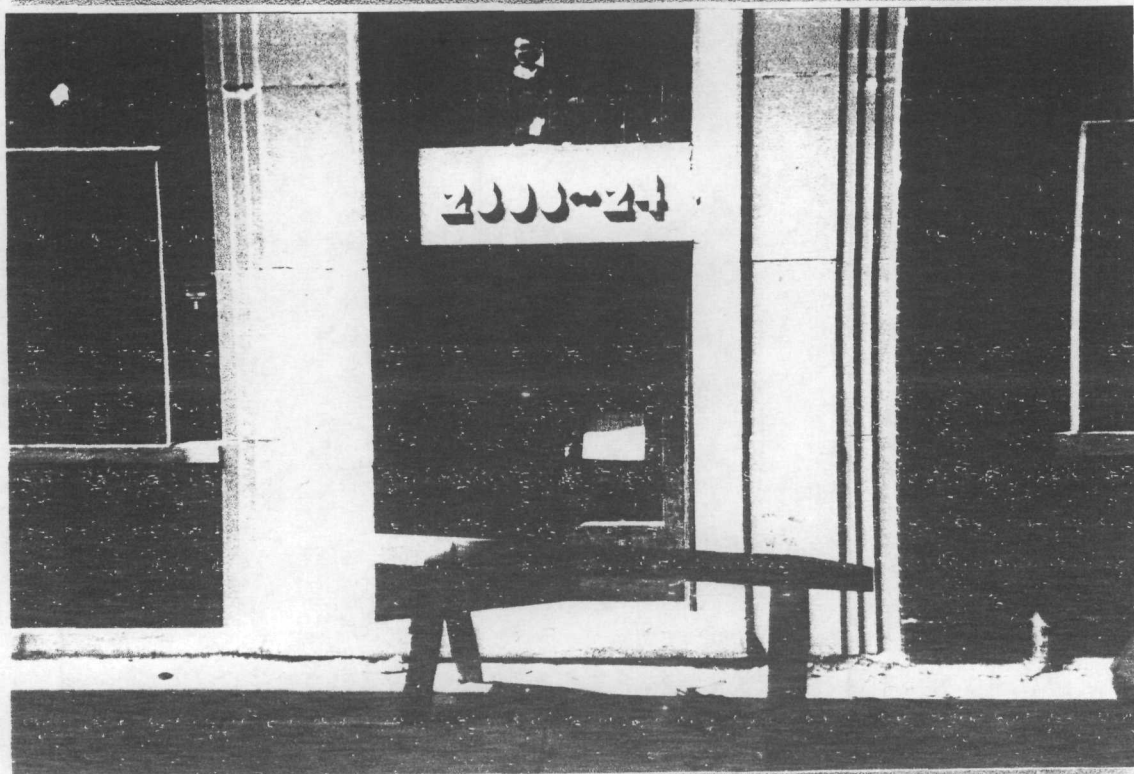
**PHOTOGRAPHER:** S. Skare



**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** South side exterior of the building.

**DATE:** August 1, 1997  
**DIRECTION:** Southeast

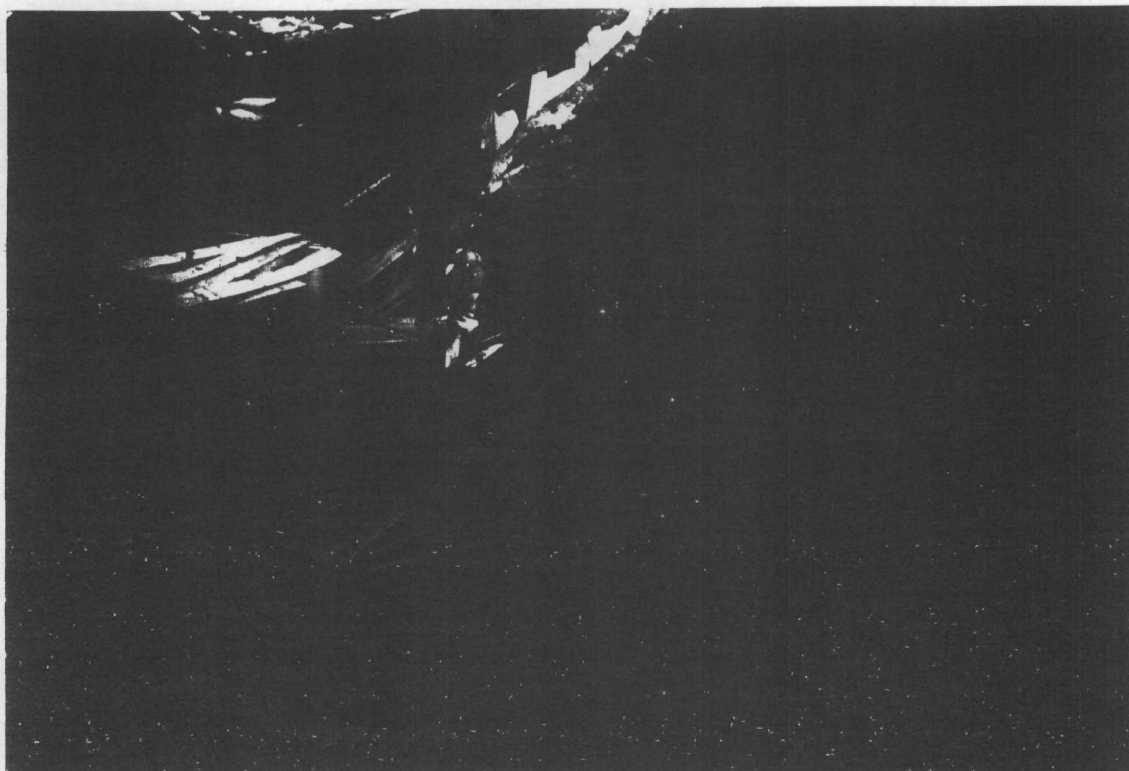
**TIME:** 15:19  
**PHOTOGRAPHER:** S. Skare



**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Front entrance of building.

**DATE:** August 1, 1997  
**DIRECTION:** North

**TIME:** 15:20  
**PHOTOGRAPHER:** S. Skare

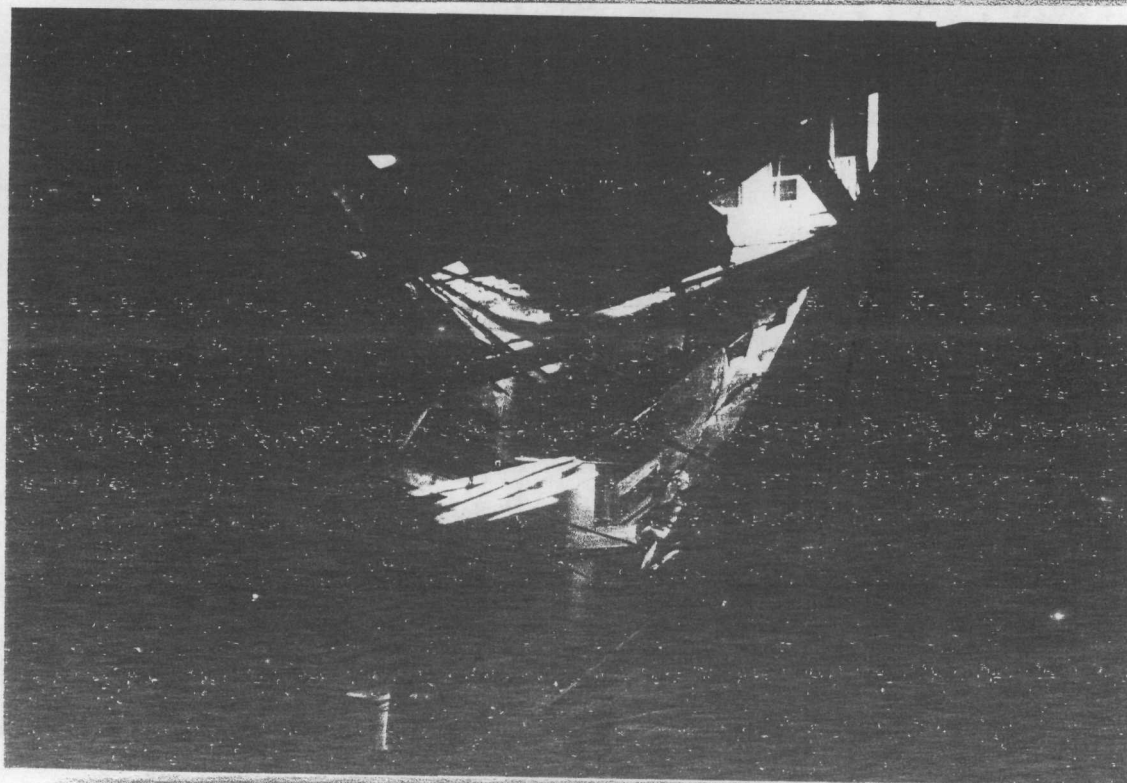


**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL

**DATE:** August 8, 1997  
**DIRECTION:** East

**TIME:** 09:45  
**PHOTOGRAPHER:** S. Skare

**SUBJECT:** Hole in the roof of the building. Note drums and debris.



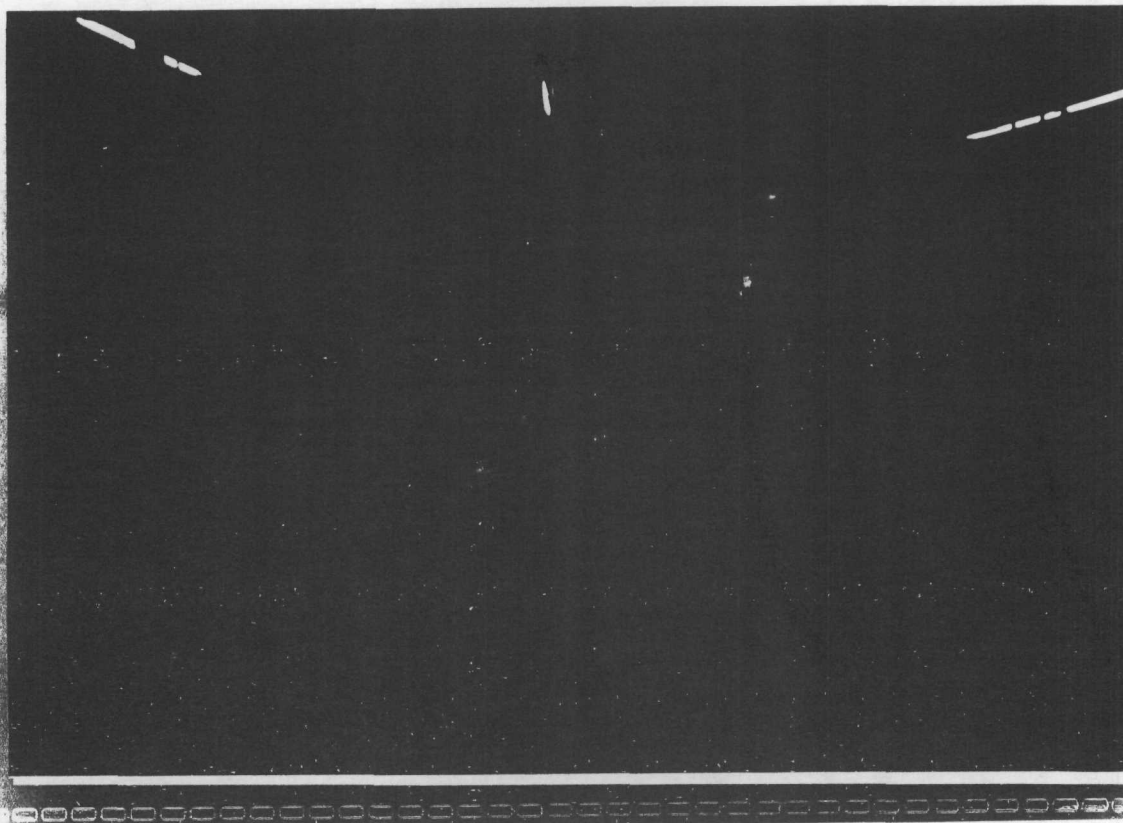
**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL

**DATE:** August 8, 1997  
**DIRECTION:** East

**TIME:** 09:48  
**PHOTOGRAPHER:** S. Skare

**SUBJECT:** Hole in the roof of the Moschiano Plating building.

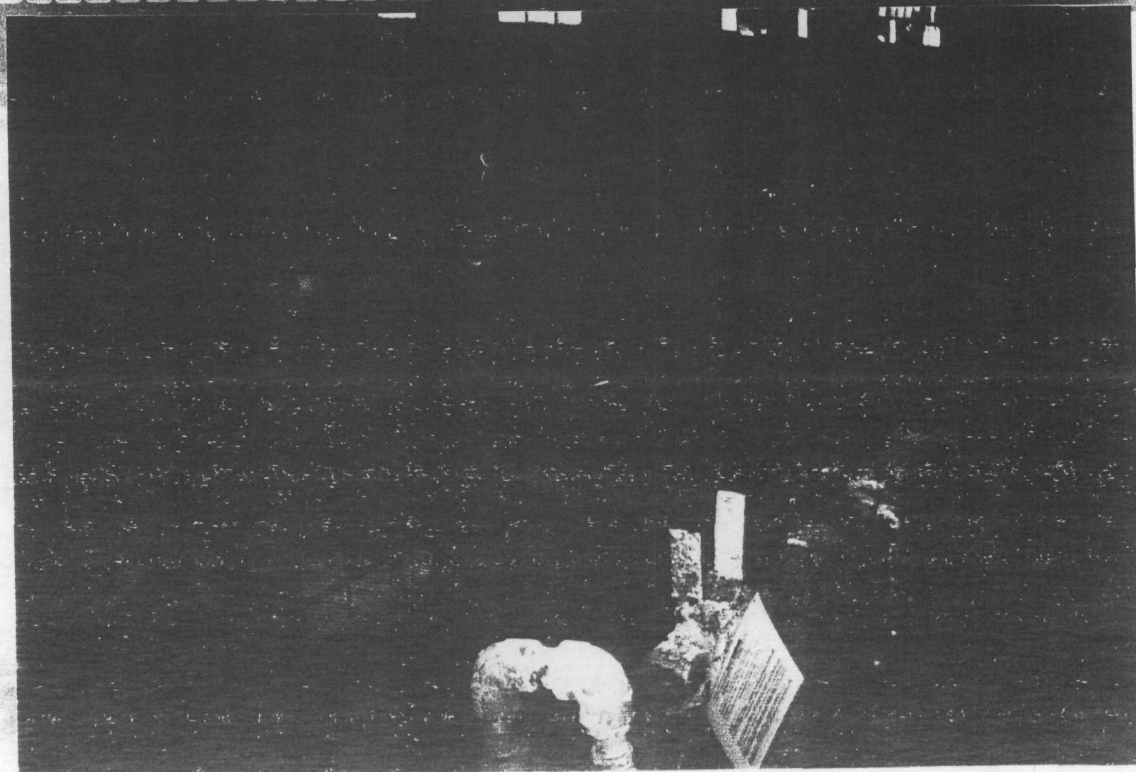




**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** View of Plating area #2.

**DATE:** August 8, 1997  
**DIRECTION:** North

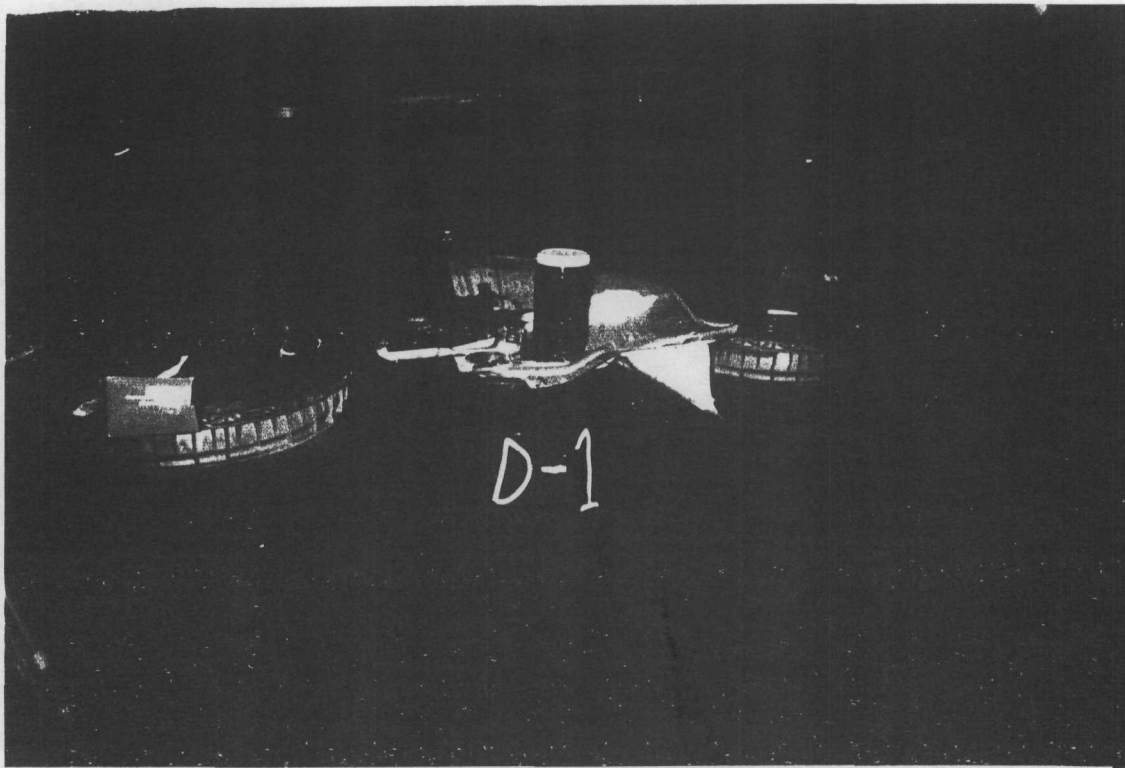
**TIME:** 09:50  
**PHOTOGRAPHER:** S. Skare



**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** View of Plating area #1.

**DATE:** August 8, 1997  
**DIRECTION:** South

**TIME:** 09:55  
**PHOTOGRAPHER:** S. Skare



**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Sample D-1.

**DATE:** August 8, 1997  
**DIRECTION:** North

**TIME:** 11:35  
**PHOTOGRAPHER:** T. Cook

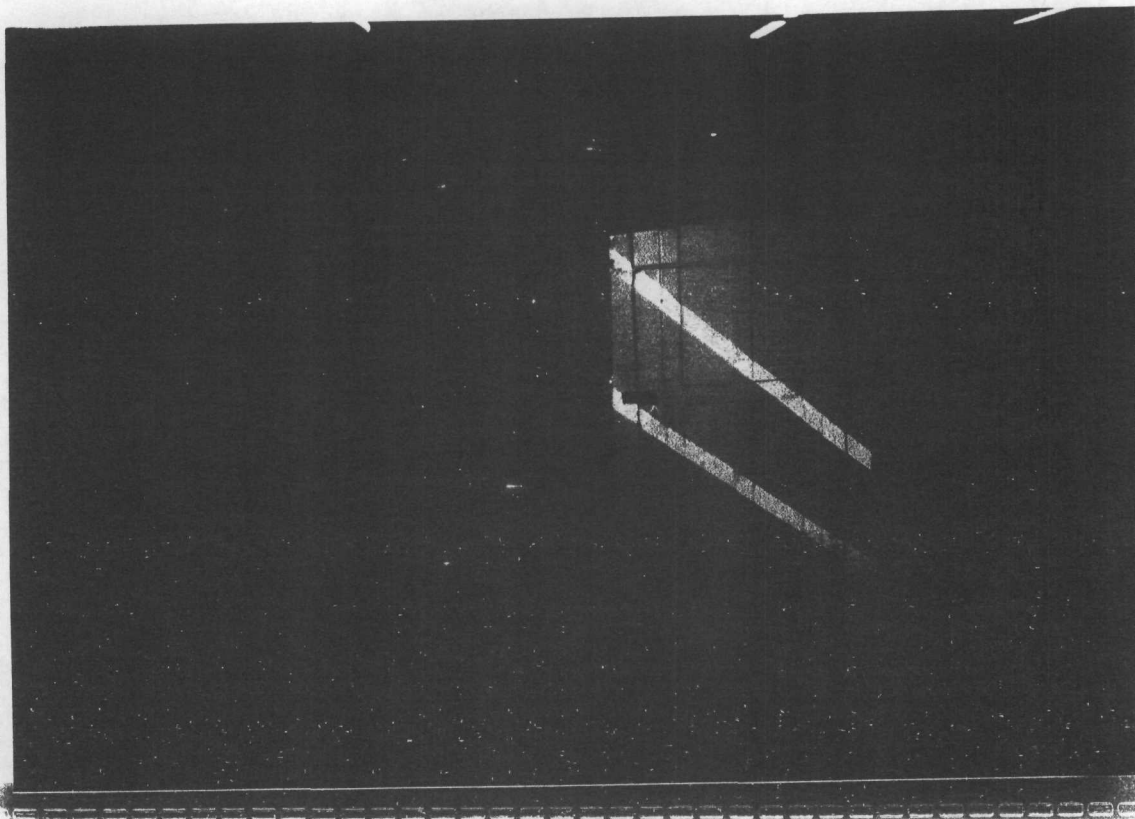


**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Inside view of copper cyanide vat from which sample V-1 was collected.

**DATE:** August 8, 1997  
**DIRECTION:** East

**TIME:** 11:40  
**PHOTOGRAPHER:** T. Cook





**SITE:** Moschiano Plating

**DATE:** August 8, 1997

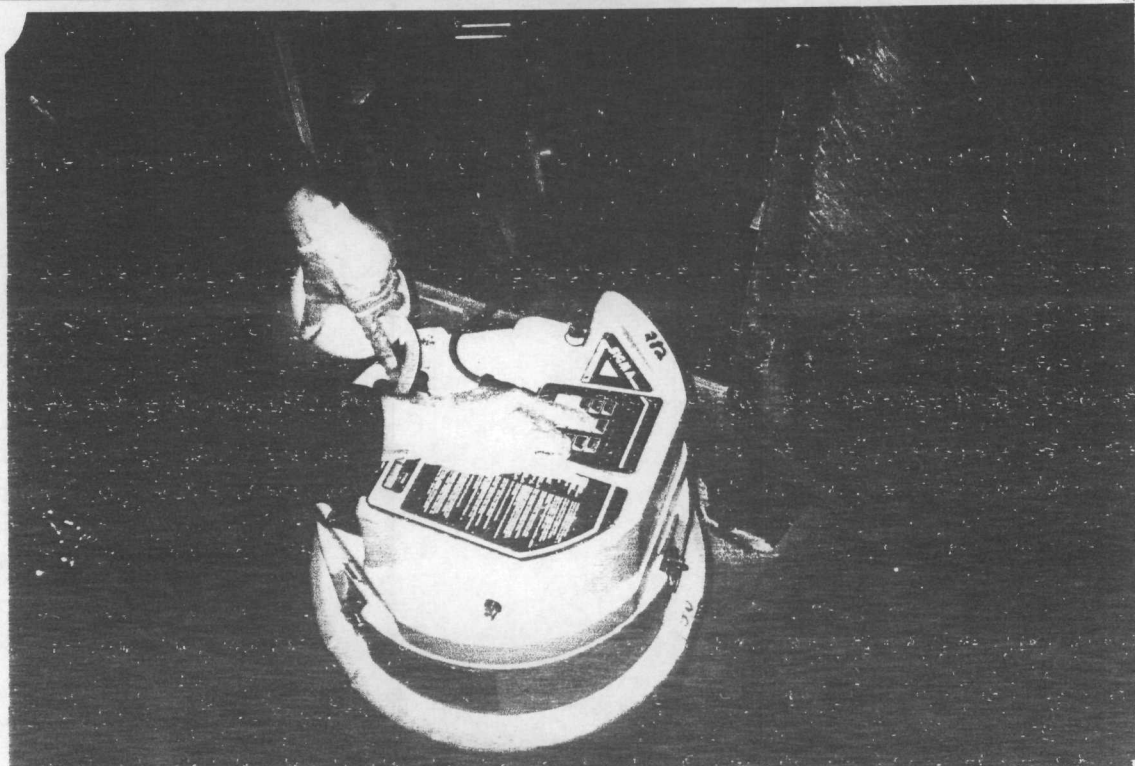
**TIME:** 10:10

**LOCATION:** Chicago, IL

**DIRECTION:** North

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** MWRDGC sample collection unit.



**SITE:** Moschiano Plating

**DATE:** August 8, 1997

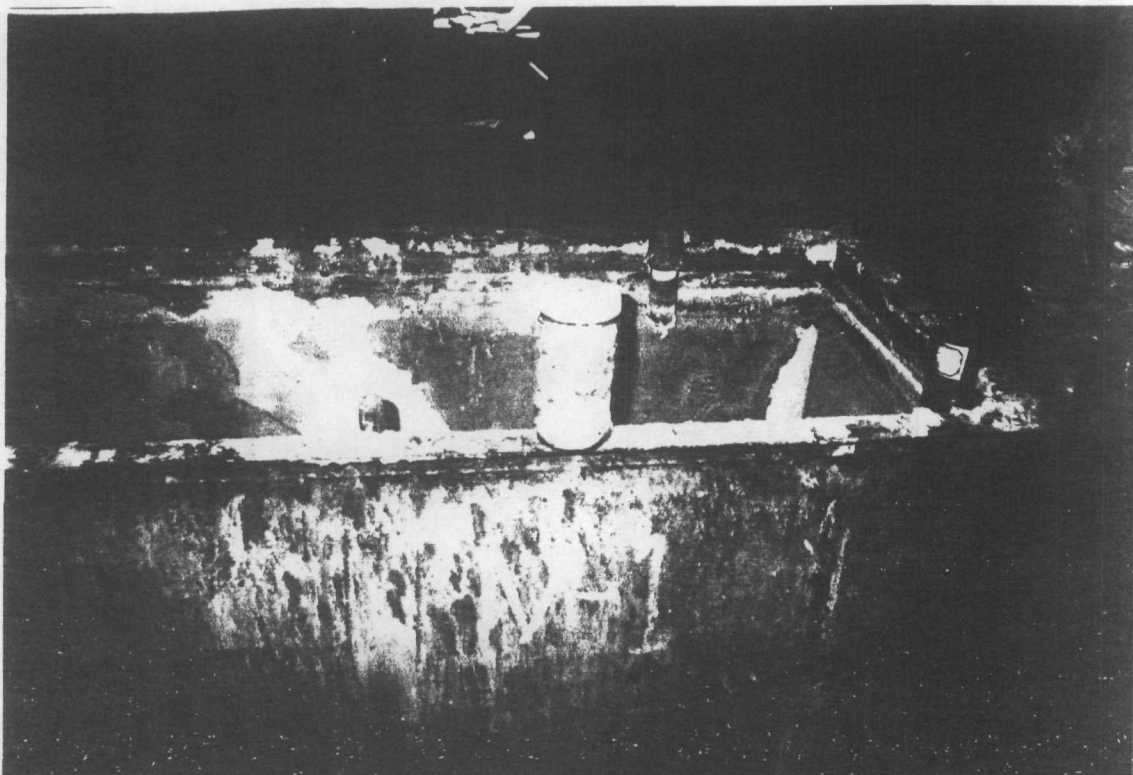
**TIME:** 10:25

**LOCATION:** Chicago, IL

**DIRECTION:** Northwest

**PHOTOGRAPHER:** T. Cook

**SUBJECT:** MWRDGC



SITE: Moschiano Plating  
 LOCATION: Chicago, IL  
 SUBJECT: Sample V-1.

DATE: August 8, 1997  
 DIRECTION: East

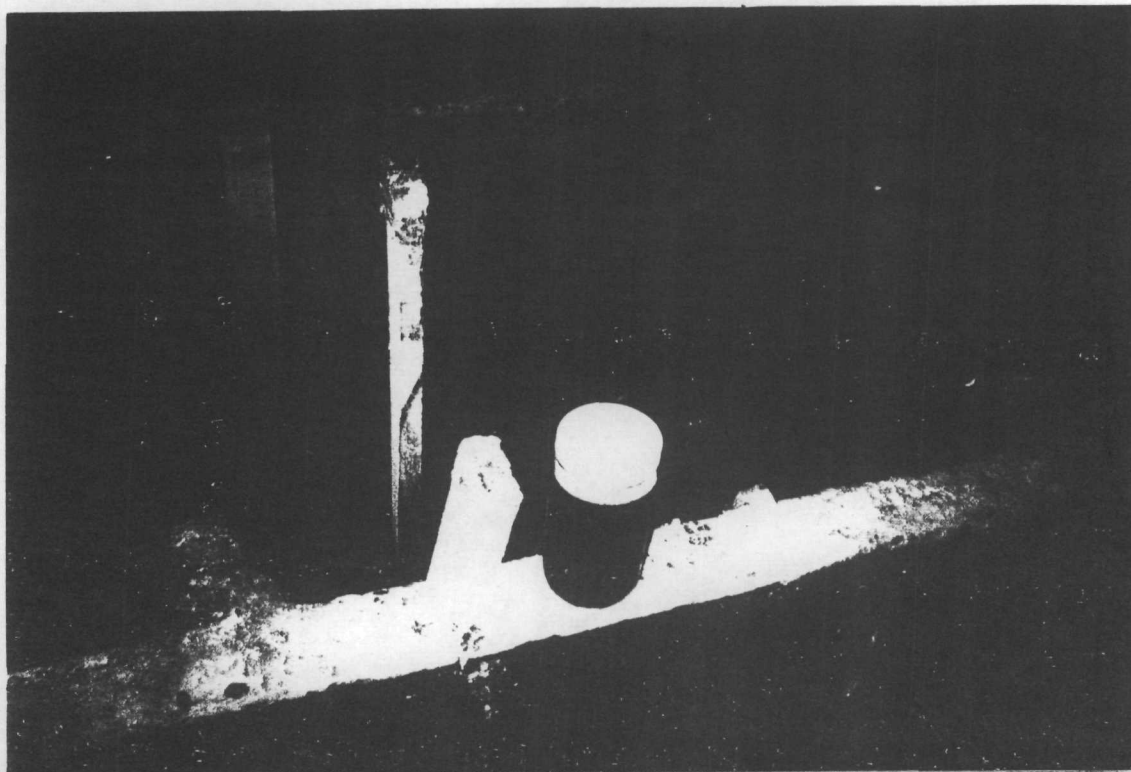
TIME: 11:42  
 PHOTOGRAPHER: T. Cook



SITE: Moschiano Plating  
 LOCATION: Chicago, IL  
 SUBJECT: Sample V-1.

DATE: August 8, 1997  
 DIRECTION: East

TIME: 11:42  
 PHOTOGRAPHER: T. Cook



**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Sample V-2.

**DATE:** August 8, 1997  
**DIRECTION:** East

**TIME:** 11:47  
**PHOTOGRAPHER:** T. Cook



**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Vat from which sample V-3 was collected.

**DATE:** August 8, 1997  
**DIRECTION:** Down

**TIME:** 11:55  
**PHOTOGRAPHER:** T. Cook

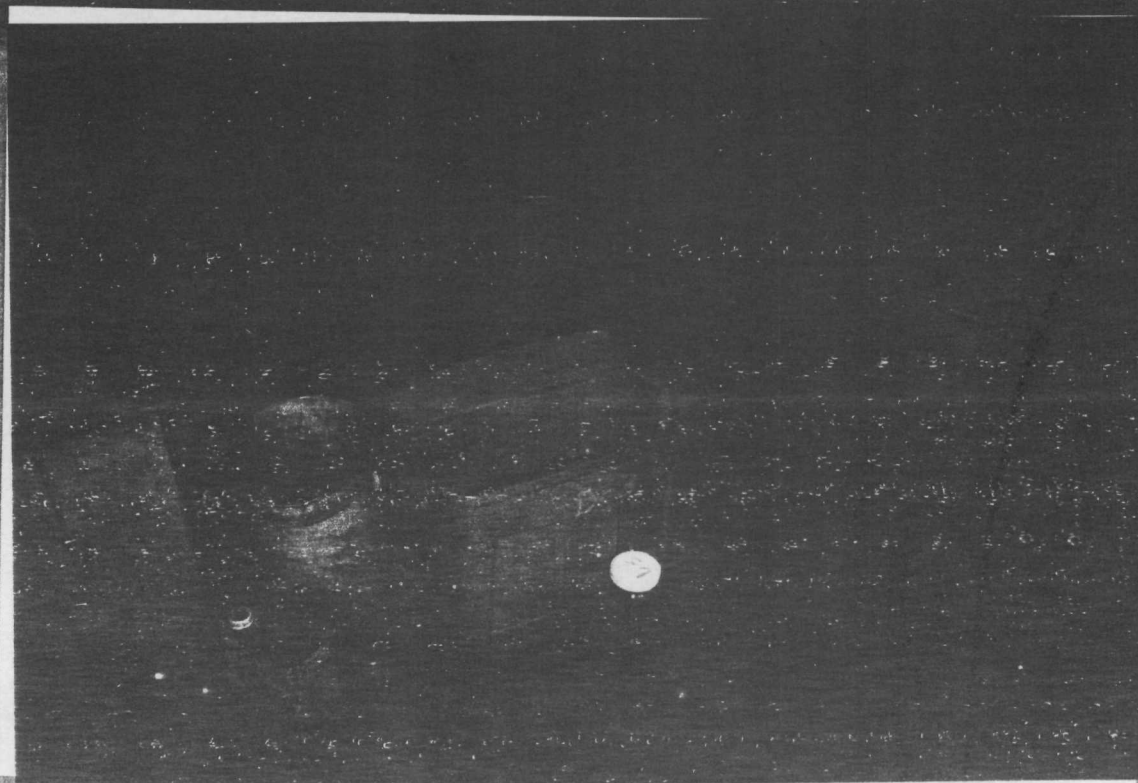




**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Sample D-2.

**DATE:** August 8, 1997  
**DIRECTION:** North

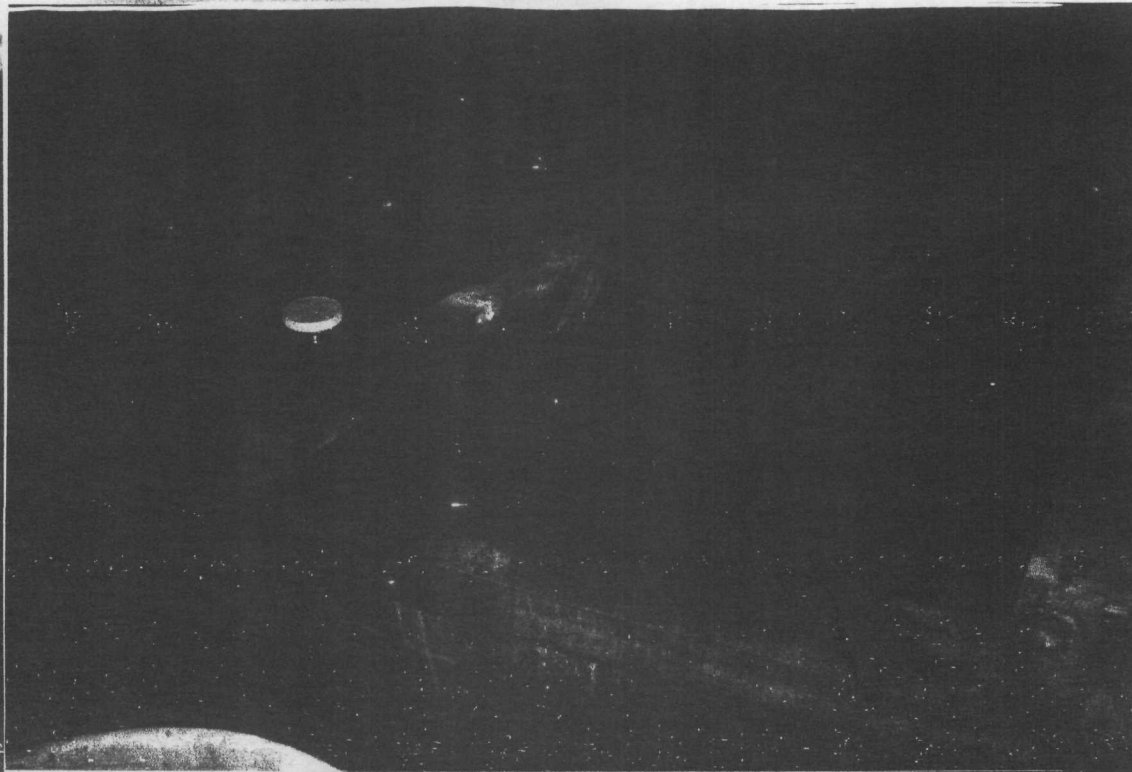
**TIME:** 12:05  
**PHOTOGRAPHER:** T. Cook



**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Sample D-3, which was collected from the Lacquer room.

**DATE:** August 8, 1997  
**DIRECTION:** Southwest

**TIME:** 12:15  
**PHOTOGRAPHER:** T. Cook



**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Sample V-4.

**DATE:** August 8, 1997  
**DIRECTION:** West

**TIME:** 11:57  
**PHOTOGRAPHER:** T. Cook

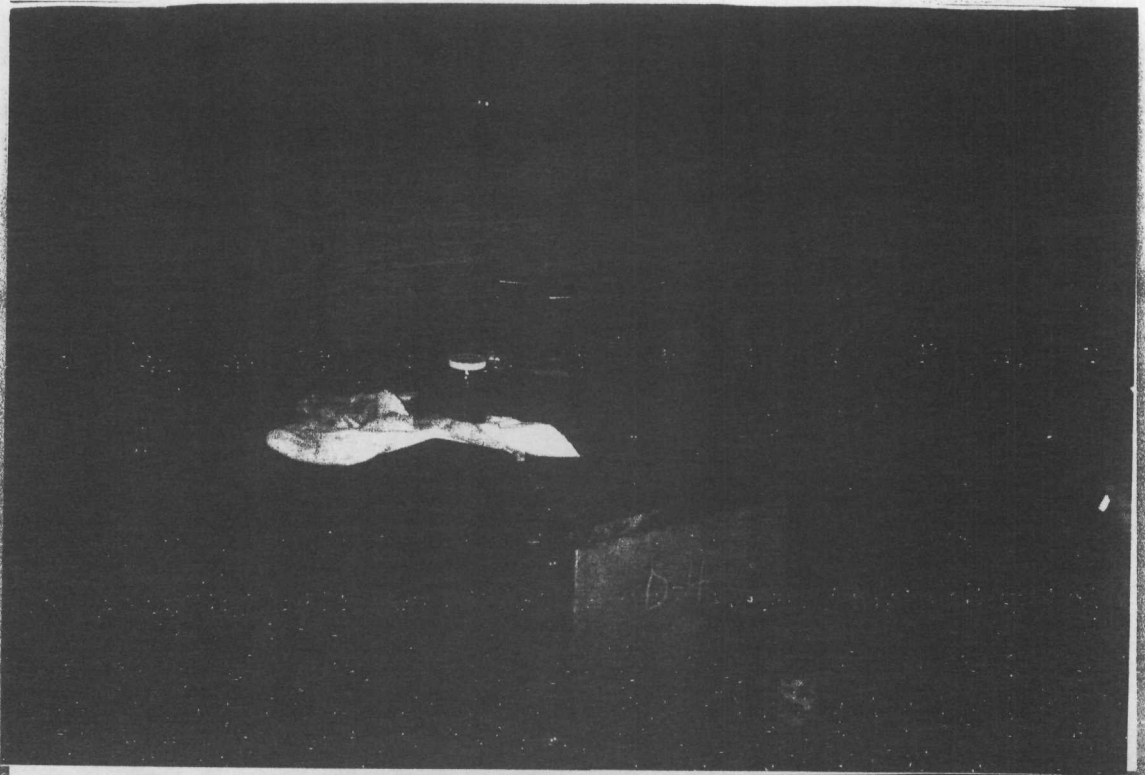


**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Sample V-5.

**DATE:** August 8, 1997  
**DIRECTION:** West

**TIME:** 12:03  
**PHOTOGRAPHER:** T. Cook



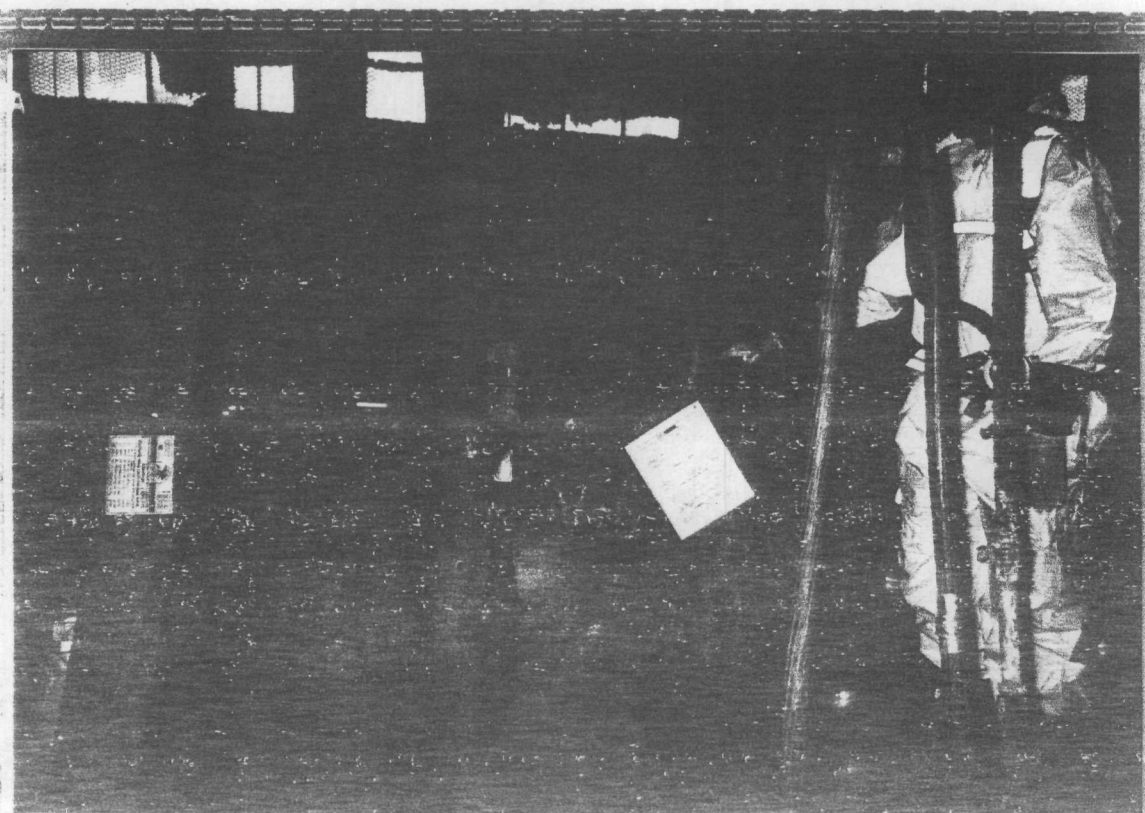


**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL

**DATE:** August 8, 1997  
**DIRECTION:** East

**TIME:** 12:19  
**PHOTOGRAPHER:** T. Cook

**SUBJECT:** Sample D-4, which was collected from the Lacquer room.



**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Sample V-6.

**DATE:** August 8, 1997  
**DIRECTION:** South

**TIME:** 12:27  
**PHOTOGRAPHER:** T. Cook



**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Sample V-7.

**DATE:** August 8, 1997  
**DIRECTION:** South

**TIME:** 12:31  
**PHOTOGRAPHER:** T. Cook

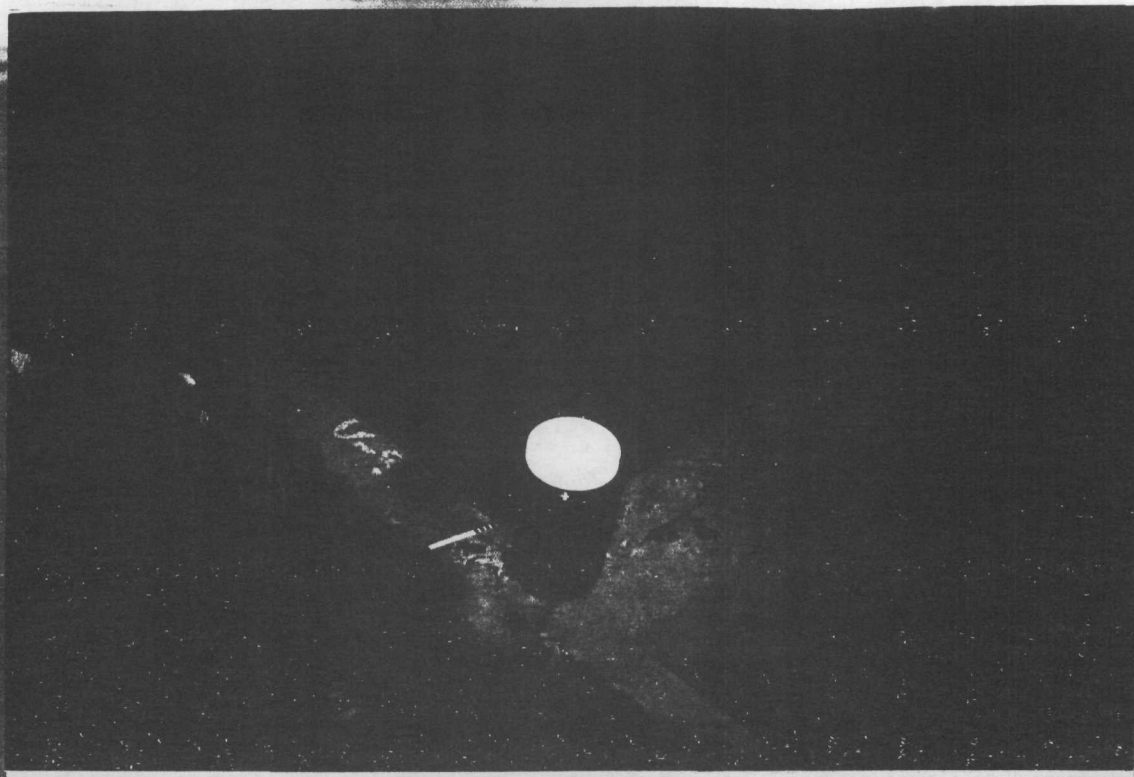


**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Sample V-8.

**DATE:** August 8, 1997  
**DIRECTION:** Southwest

**TIME:** 12:33  
**PHOTOGRAPHER:** T. Cook

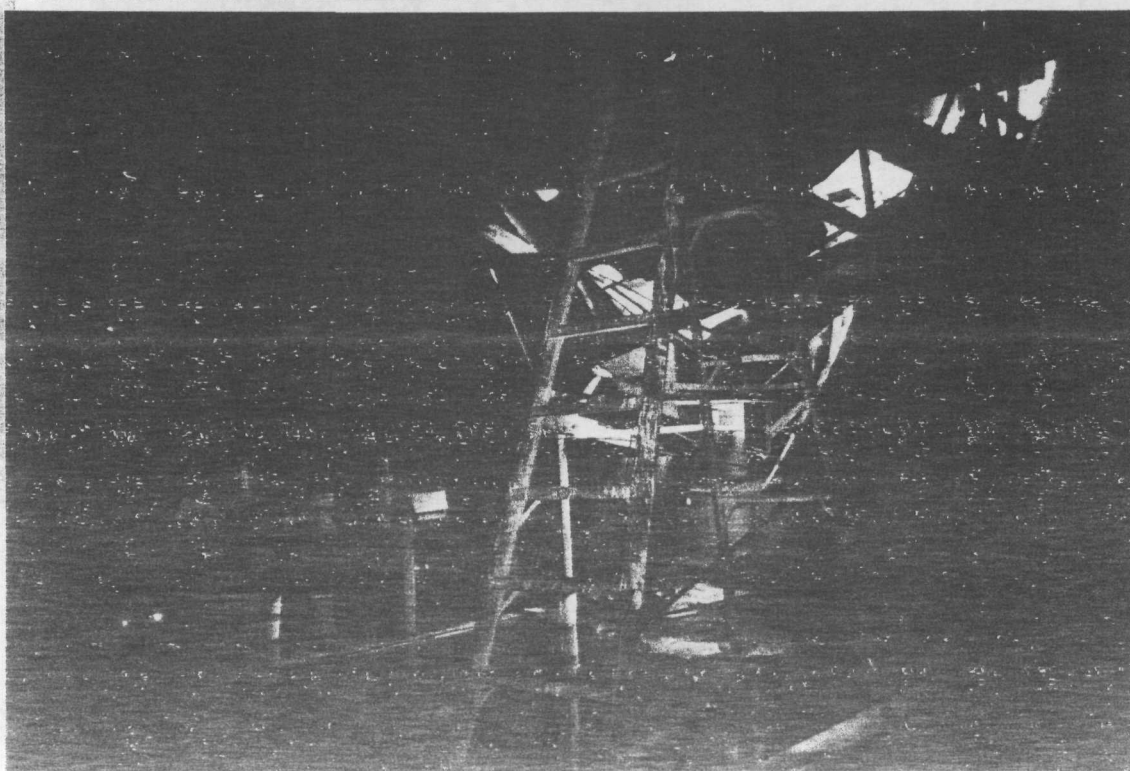




**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Sample V-9.

**DATE:** August 8, 1997  
**DIRECTION:** South

**TIME:** 12:35  
**PHOTOGRAPHER:** T. Cook



**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Hole in the east of the plating building. Note the wooden roof supports put in place by JVL.

**DATE:** August 14, 1997  
**DIRECTION:** Northeast

**TIME:** 10:48  
**PHOTOGRAPHER:** S. Weening





**SITE:** Moschiano Plating

**DATE:** August 14, 1997

**TIME:** 10:50

**LOCATION:** Chicago, IL

**DIRECTION:** North

**PHOTOGRAPHER:** S. Wenning

**SUBJECT:** View of wooden roof supports.



**SITE:** Moschiano Plating

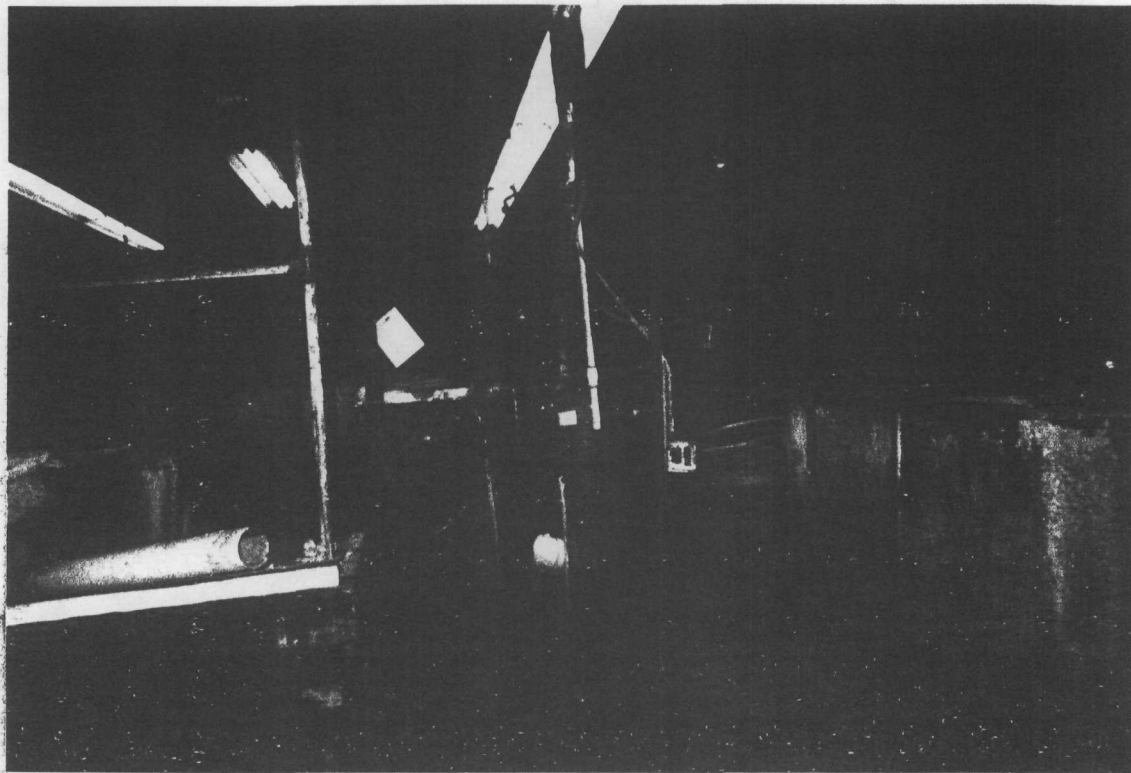
**DATE:** August 14, 1997

**TIME:** 10:52

**LOCATION:** Chicago, IL

**DIRECTION:** East

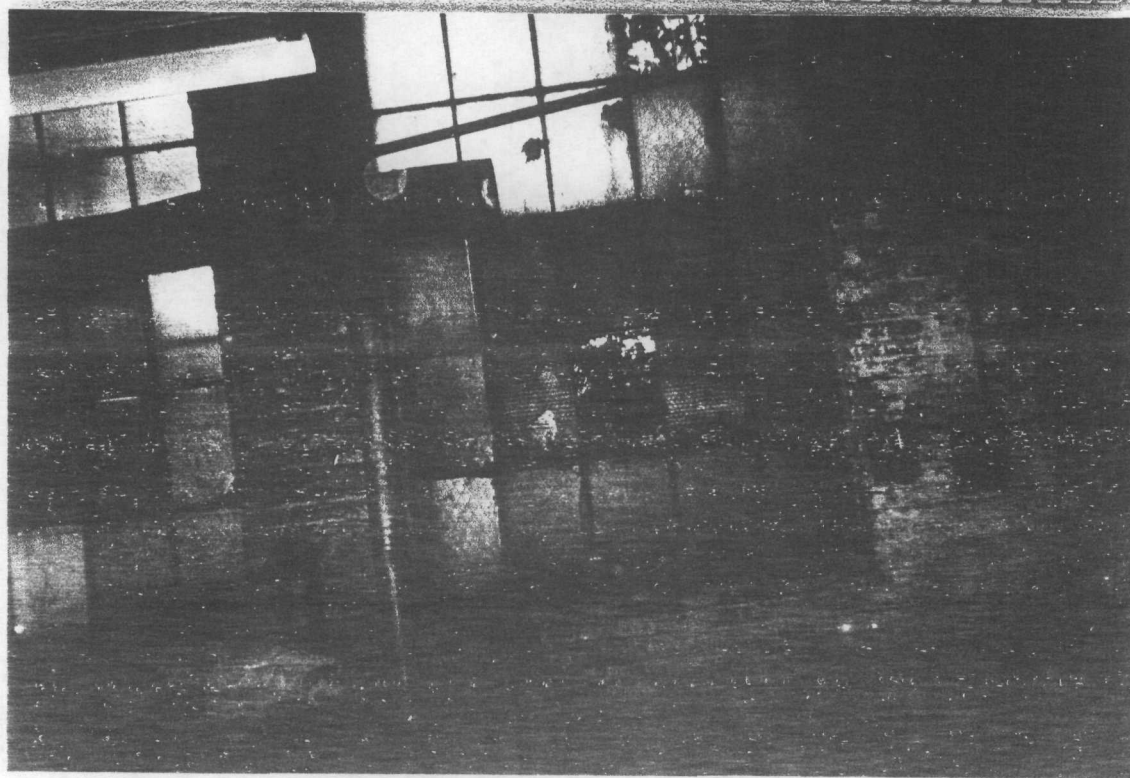
**PHOTOGRAPHER:** S. Wenning



**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Plating area #1. Note empty space in front where tank was stolen.

**DATE:** August 14, 1997  
**DIRECTION:** North

**TIME:** 11:00  
**PHOTOGRAPHER:** S. Wenning

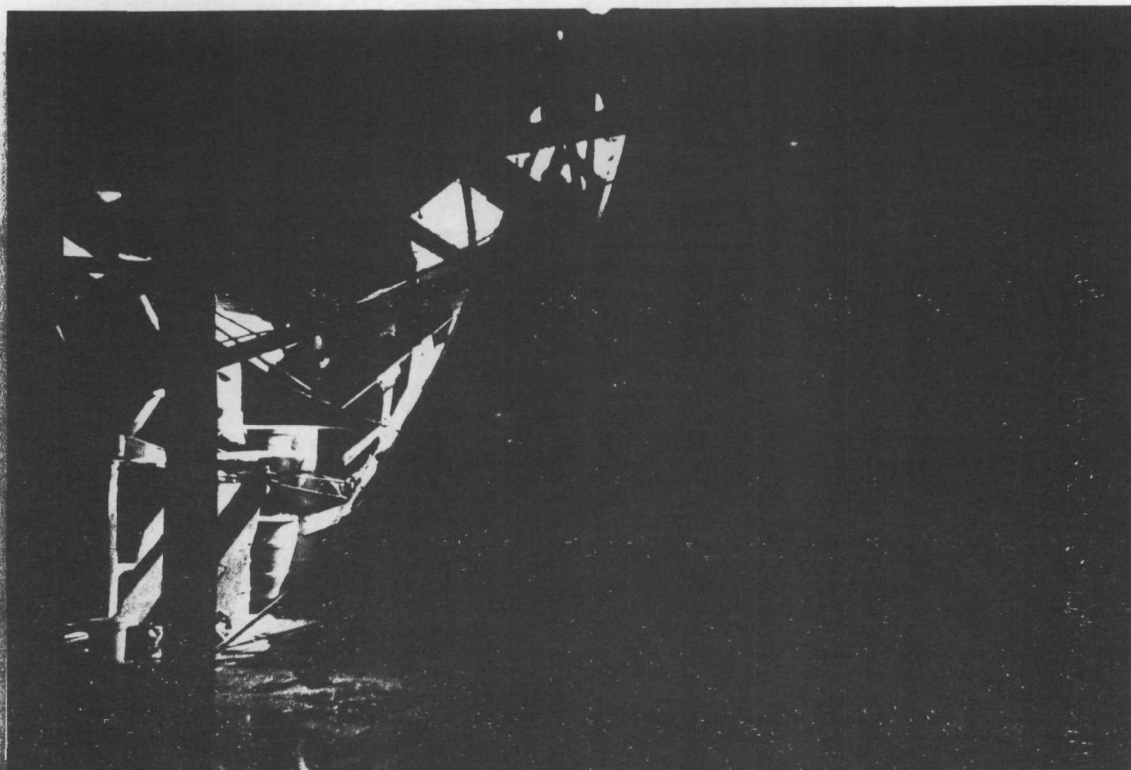


**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Rear window where scavengers are believed to gain access to the site.

**DATE:** August 14, 1997  
**DIRECTION:** North

**TIME:** 11:05  
**PHOTOGRAPHER:** S. Wenning





**SITE:** Moschiano Plating

**DATE:** August 14, 1997

**TIME:** 11:30

**LOCATION:** Chicago, IL

**DIRECTION:** Northeast

**PHOTOGRAPHER:** S. Wenning

**SUBJECT:** Hole in the roof of the Moschiano Plating building. Note drums piled under debris.



**SITE:** Moschiano Plating

**DATE:** August 14, 1997

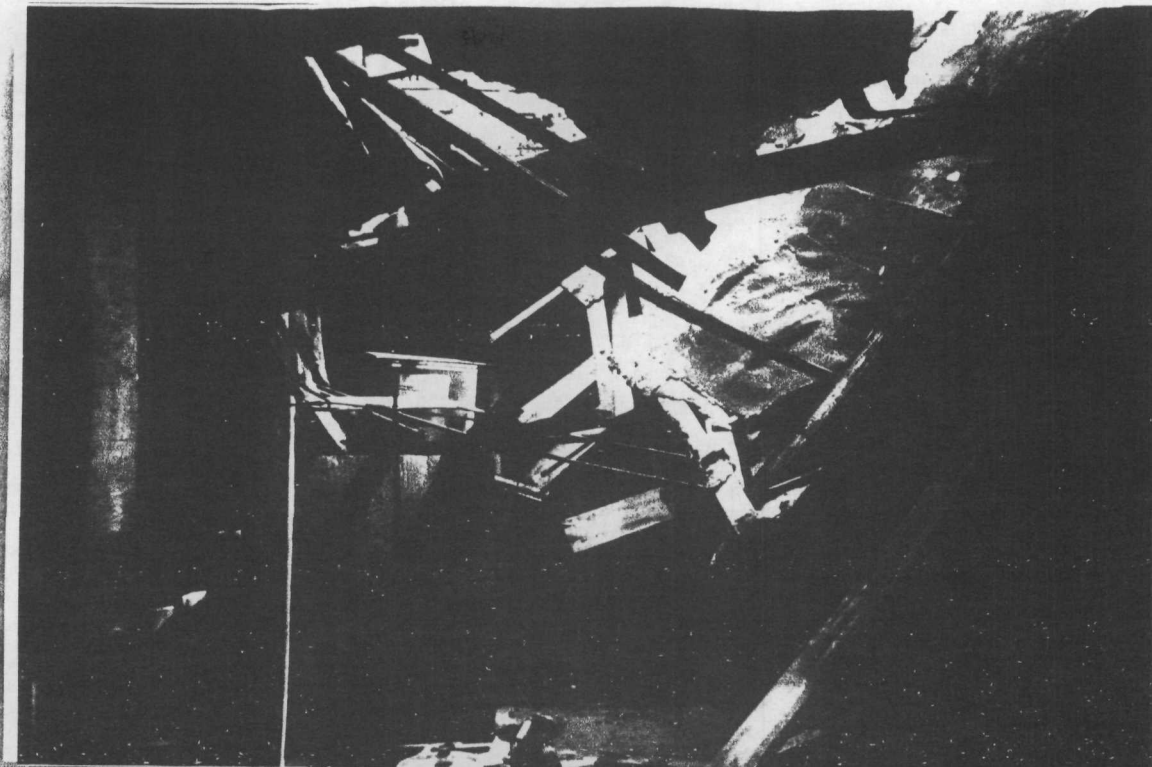
**TIME:** 11:35

**LOCATION:** Chicago, IL

**DIRECTION:** Northeast

**PHOTOGRAPHER:** S. Wenning

**SUBJECT:** Hole in the roof. Note wooden roof supports.



**SITE:** Moschiano Plating

**DATE:** August 14, 1997

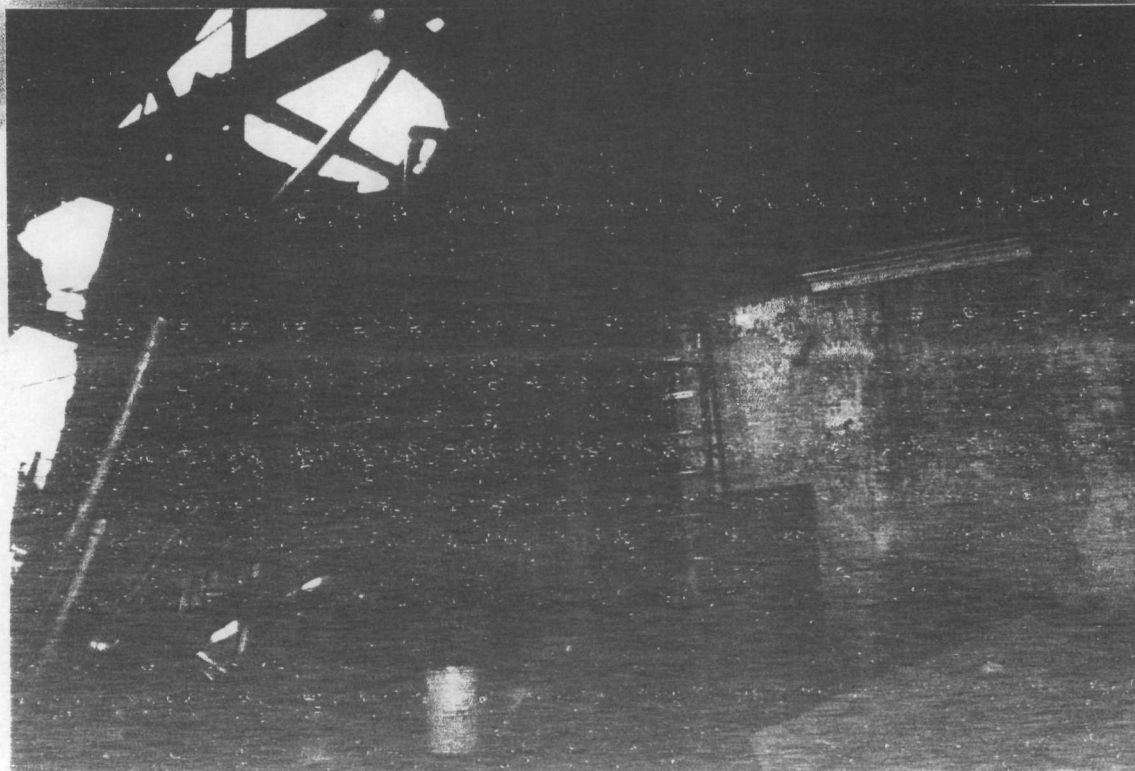
**TIME:** 11:40

**LOCATION:** Chicago, IL

**DIRECTION:** East

**PHOTOGRAPHER:** S. Wenning

**SUBJECT:** Hole in the roof of the Moschiano Plating building.



**SITE:** Moschiano Plating

**DATE:** August 14, 1997

**TIME:** 11:45

**LOCATION:** Chicago, IL

**DIRECTION:** Northeast

**PHOTOGRAPHER:** S. Wenning

**SUBJECT:** Rear wooden roof supports.





**SITE:** Moschiano Plating

**DATE:** August 14, 1997

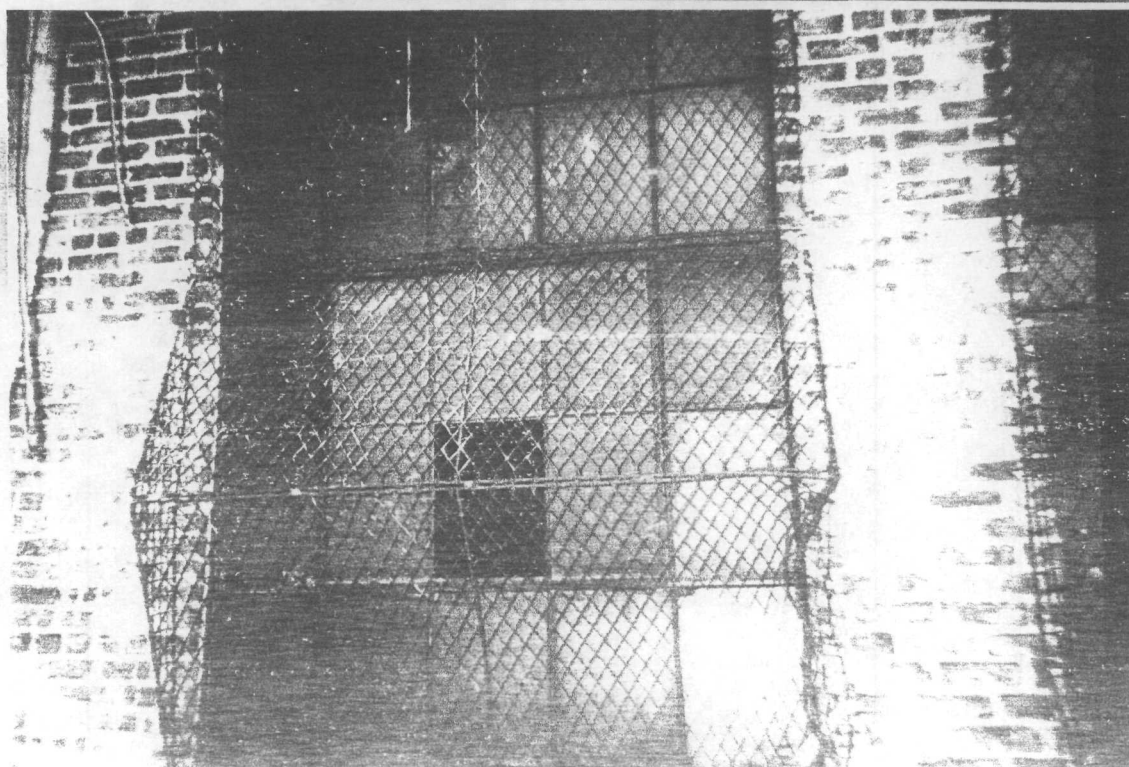
**TIME:** 14:30

**LOCATION:** Chicago, IL

**DIRECTION:** South

**PHOTOGRAPHER:** S. Wenning

**SUBJECT:** Outside view of rear window. Note metal bar and brackets installed by JVI to deter scavengers.



**SITE:** Moschiano Plating

**DATE:** August 14, 1997

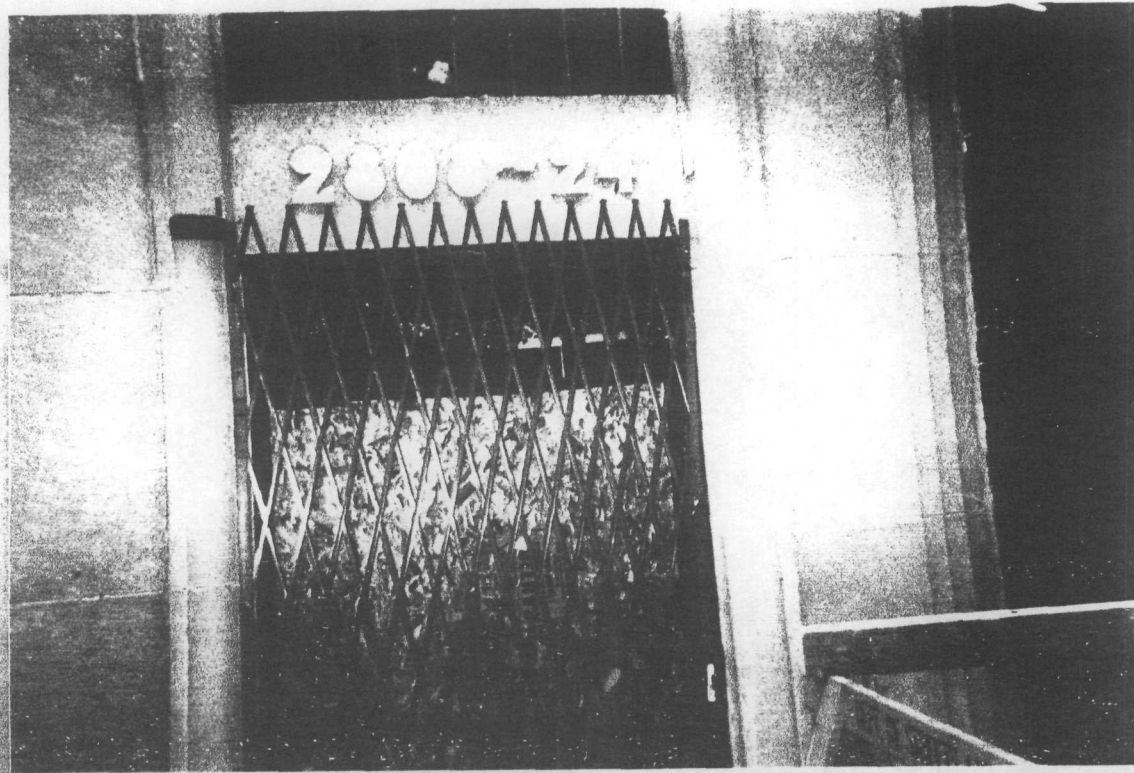
**TIME:** 14:35

**LOCATION:** Chicago, IL

**DIRECTION:** South

**PHOTOGRAPHER:** S. Wenning

**SUBJECT:** Outside view of rear window. Note metal bar and brackets installed by JVI to deter scavengers.



**SITE:** Moschiano Plating

**DATE:** August 14, 1997

**TIME:** 16:30

**LOCATION:** Chicago, IL

**DIRECTION:** North

**PHOTOGRAPHER:** S. Wenning

**SUBJECT:** Metal security door installed by JVI.



**SITE:** Moschiano Plating

**DATE:** August 14, 1997

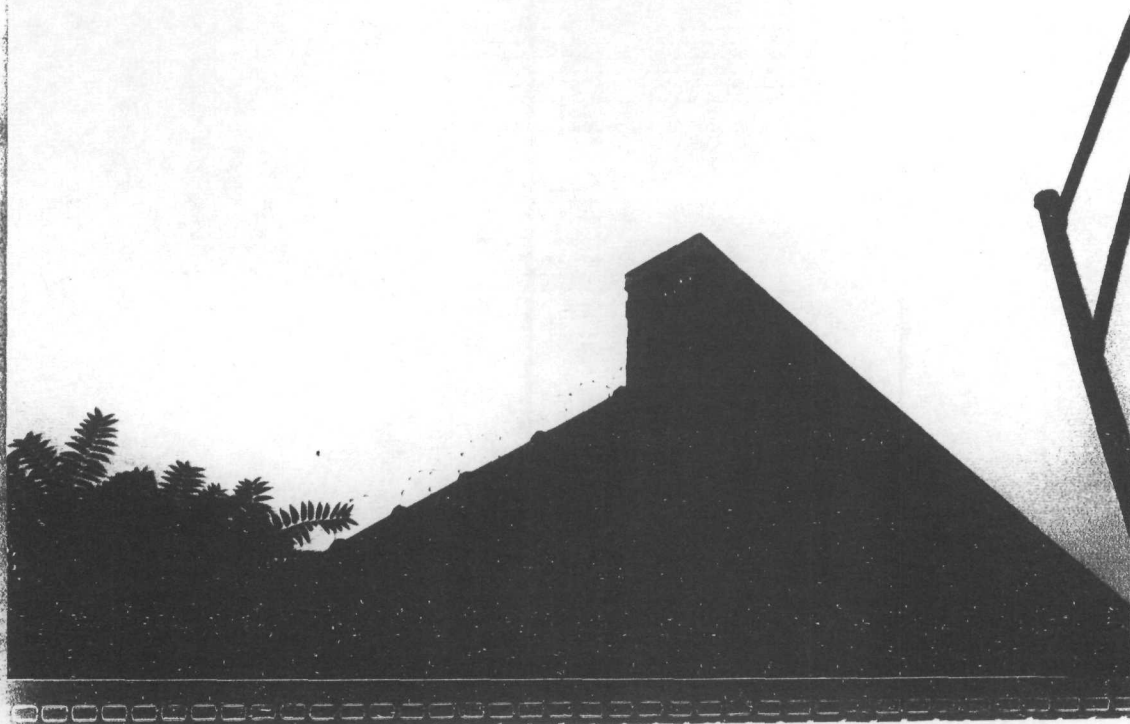
**TIME:** 16:50

**LOCATION:** Chicago, IL

**DIRECTION:** Southwest

**PHOTOGRAPHER:** S. Wenning

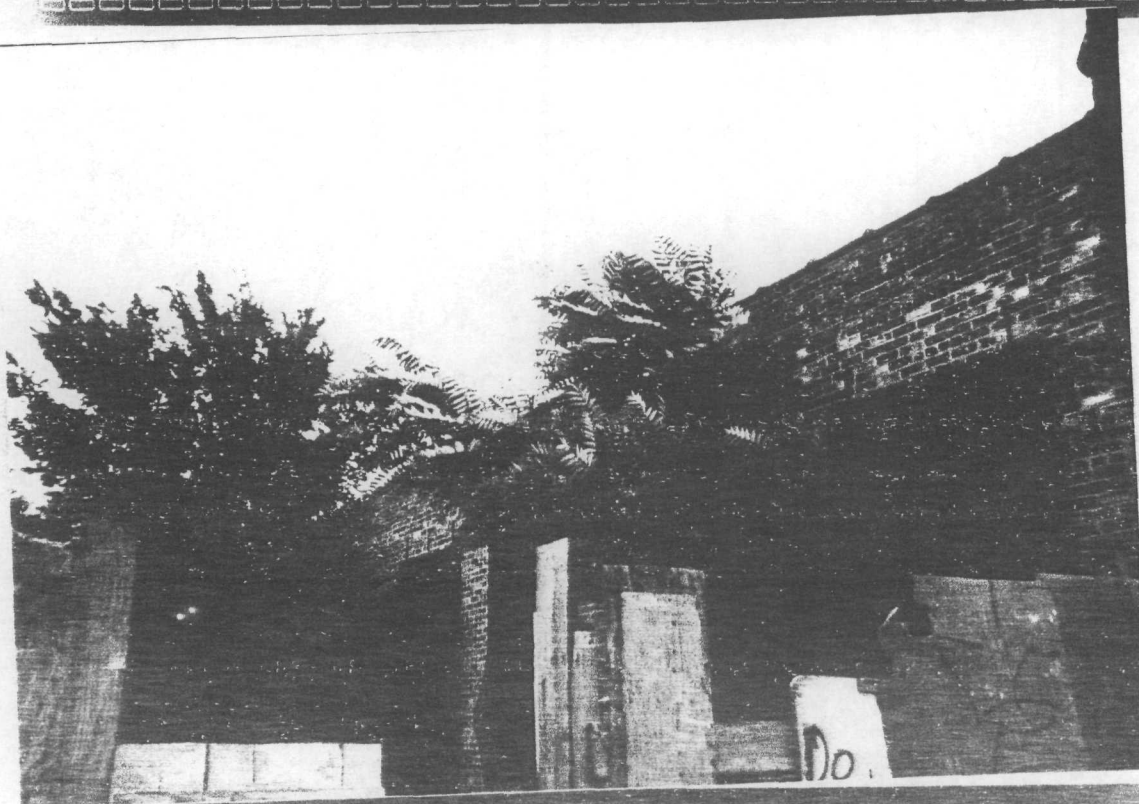
**SUBJECT:** Northwest corner of the Moschiano Plating building. Note metal wire along roof perimeter.



**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL  
**SUBJECT:** Razor wire installed along the roof perimeter of the building.

**DATE:** August 15, 1997  
**DIRECTION:** Southwest

**TIME:** 11:30  
**PHOTOGRAPHER:** S. Skare

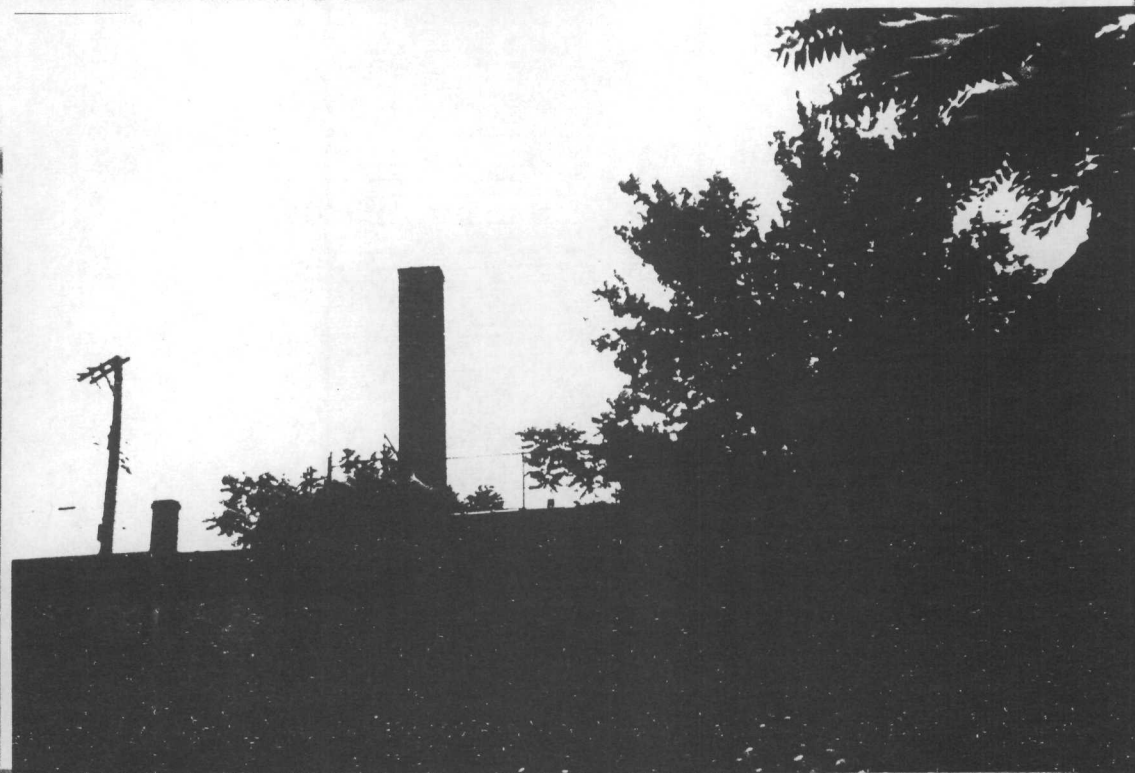


**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL

**DATE:** August 15, 1997  
**DIRECTION:** Southwest

**TIME:** 12:00  
**PHOTOGRAPHER:** S. Skare





**SITE:** Moschiano Plating

**DATE:** August 15, 1997

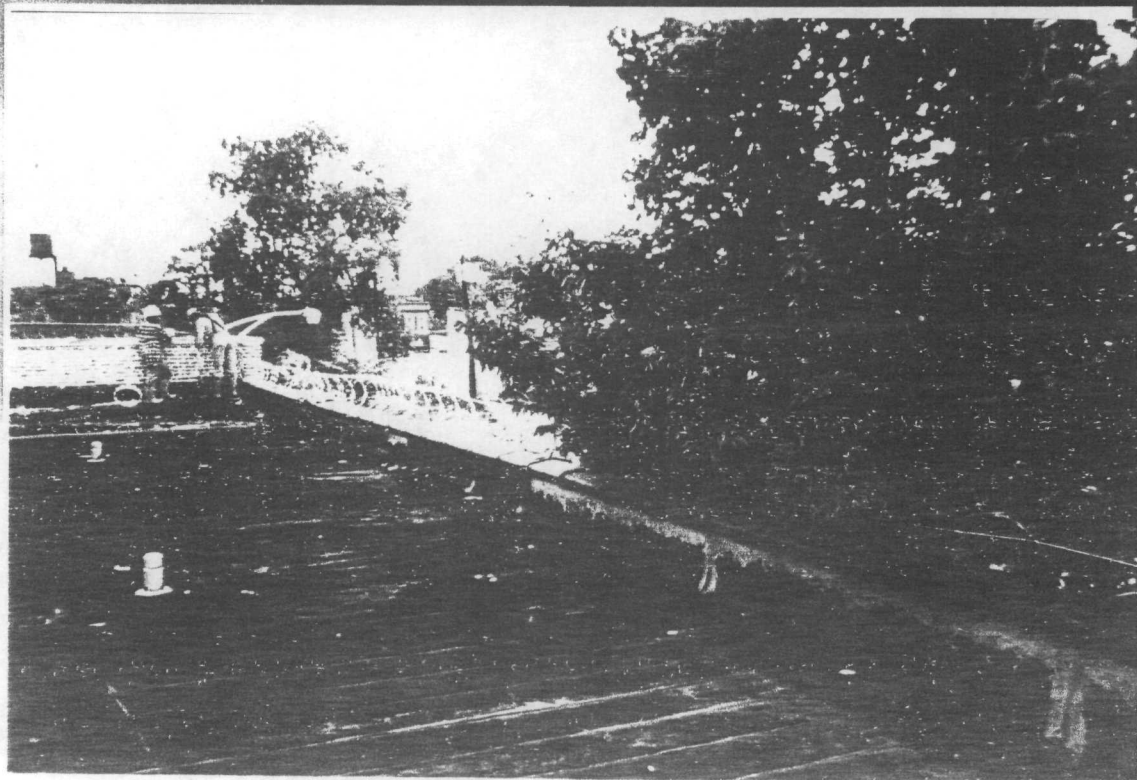
**TIME:** 13:30

**LOCATION:** Chicago, IL

**DIRECTION:** Southeast

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** Razor wire and fencing along the northeastern side of the roof perimeter.



**SITE:** Moschiano Plating

**DATE:** August 15, 1997

**TIME:** 14:00

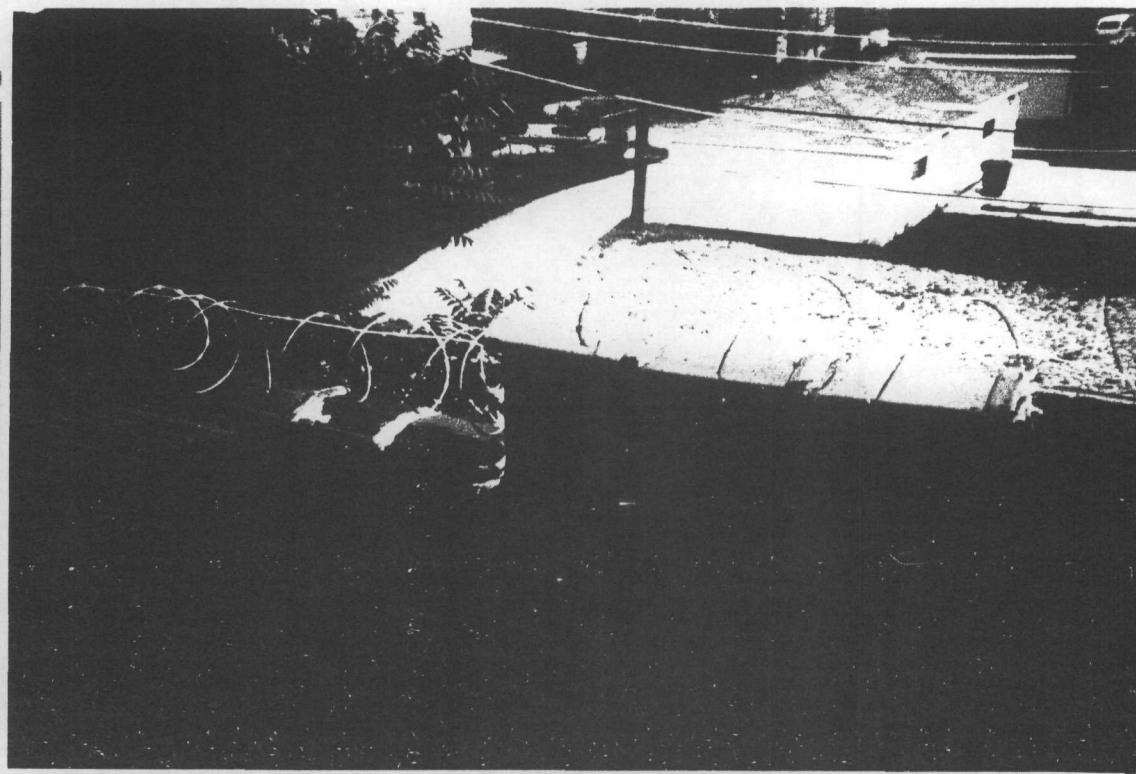
**LOCATION:** Chicago, IL

**DIRECTION:**

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** IVI employees installing razor wire along the roof perimeter.





**SITE:** Moschiano Plating

**DATE:** August 15, 1997

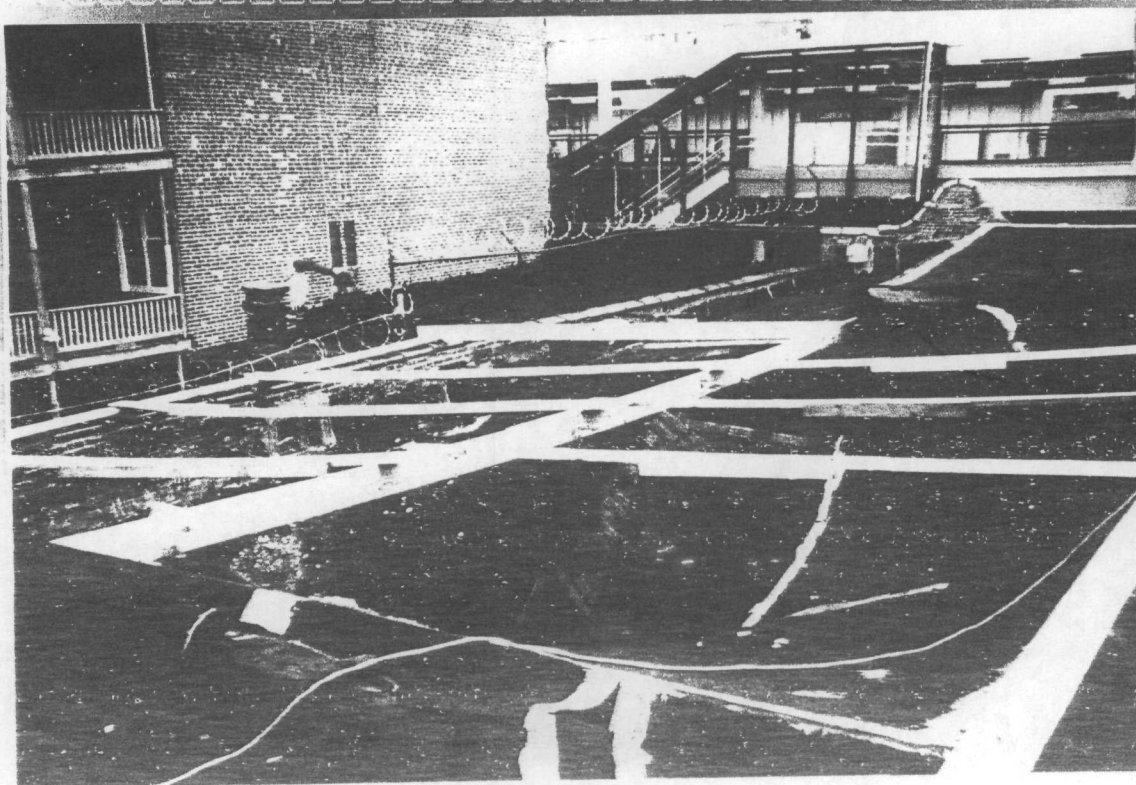
**TIME:** 14:15

**LOCATION:** Chicago, IL

**DIRECTION:** North

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** Razor wire along the northern roof perimeter of the building.



**SITE:** Moschiano Plating

**DATE:** August 15, 1997

**TIME:** 14:30

**LOCATION:** Chicago, IL

**DIRECTION:** Southeast

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** Wooden frame spanning the hole in the roof to support a sheet of plastic to shed rainwater.



**SITE:** Moschiano Plating

**DATE:** August 15, 1997

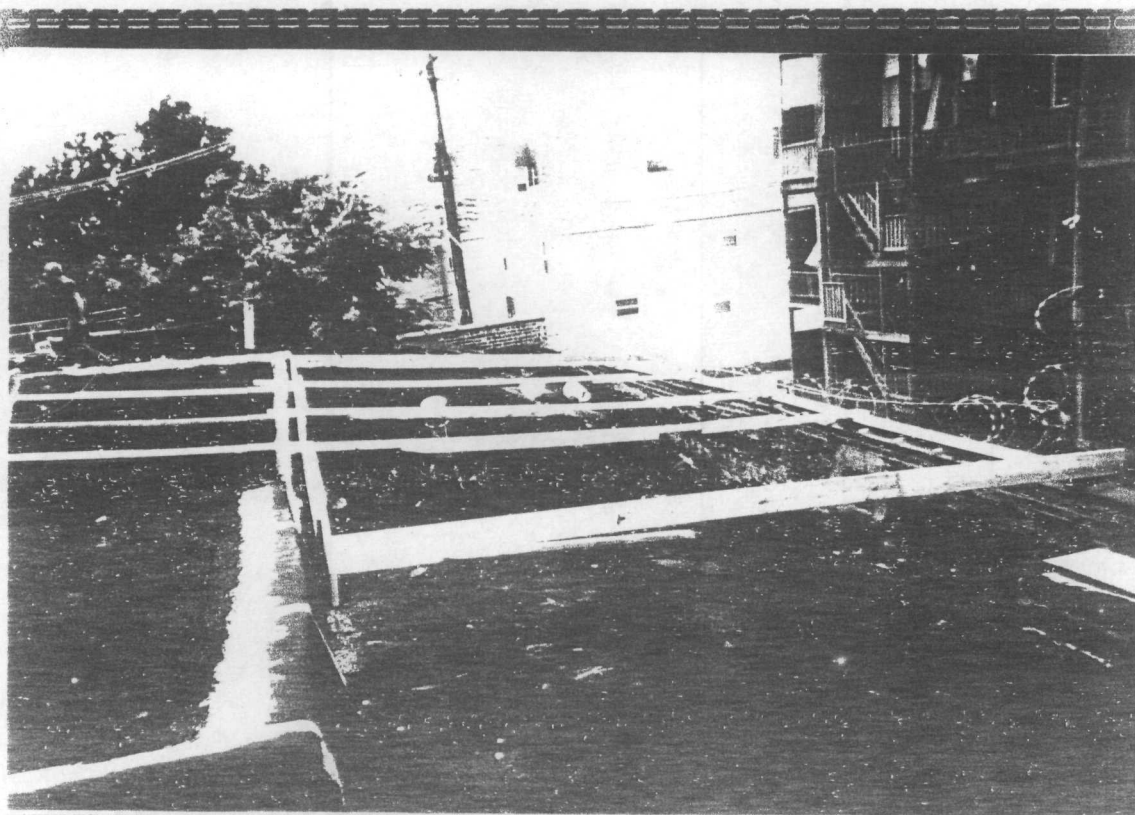
**TIME:** 15:00

**LOCATION:** Chicago, IL

**DIRECTION:** Northeast

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** Wooden frame covering the hole in the roof of the building.



**SITE:** Moschiano Plating

**DATE:** August 15, 1997

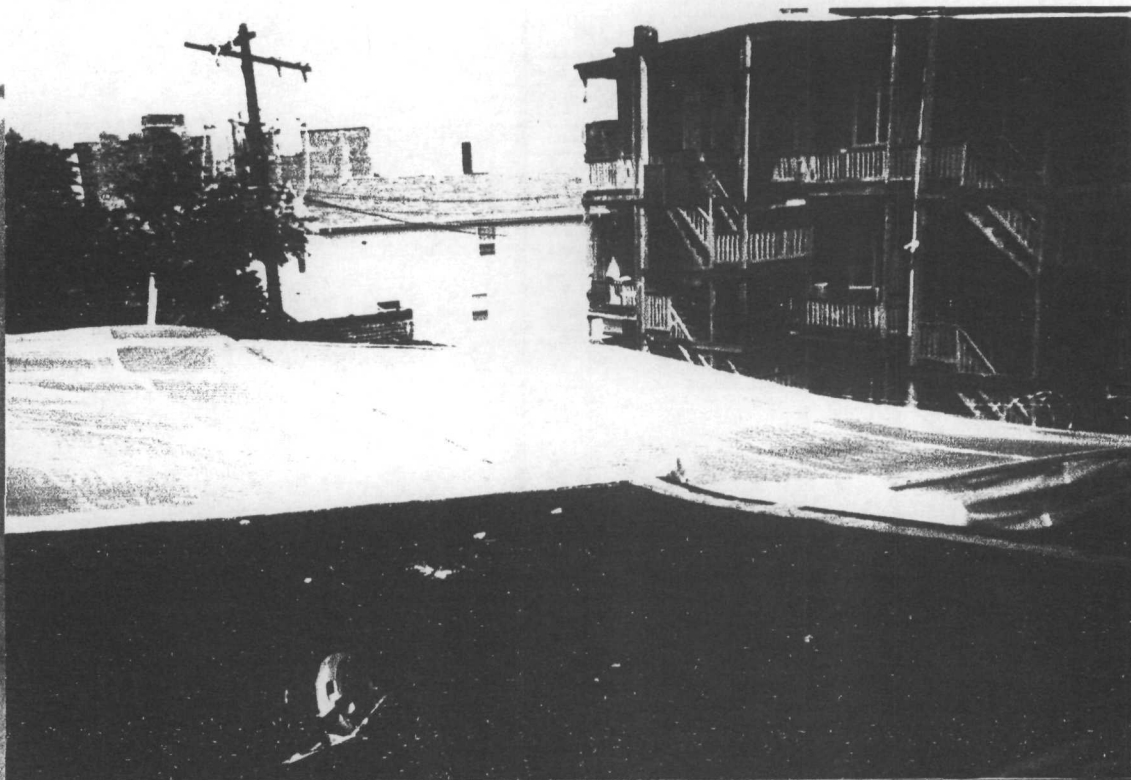
**TIME:** 15:45

**LOCATION:** Chicago, IL

**DIRECTION:** North

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** Wooden frame covering the hole in the roof of the building.



**SITE:** Moschiano Plating

**DATE:** August 15, 1997

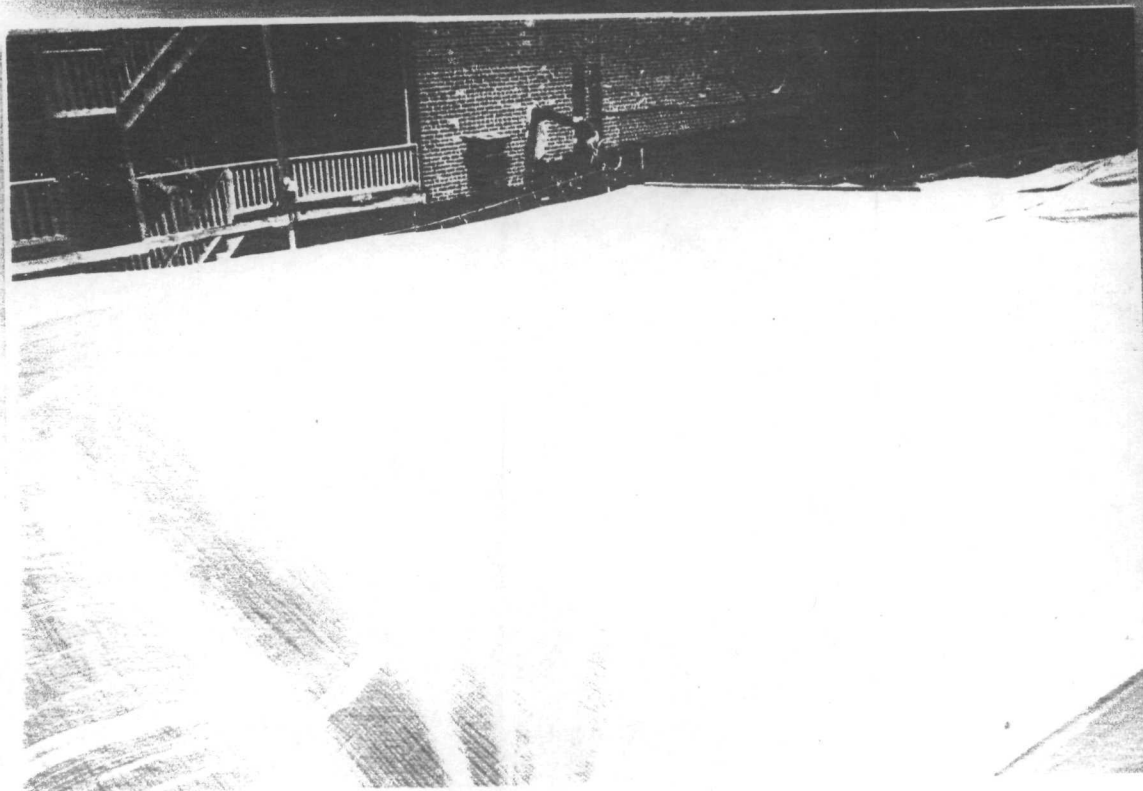
**TIME:** 16:00

**LOCATION:** Chicago, IL

**DIRECTION:** Northeast

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** Plastic sheets, supported by the wooden frame, covering the hole in the roof of the building.



**SITE:** Moschiano Plating  
**LOCATION:** Chicago, IL

**DATE:** August 15, 1997  
**DIRECTION:** Southeast

**TIME:** 16:05  
**PHOTOGRAPHER:** S. Skare

**Appendix B**  
**Analytical Data Package**





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International Specialists in the Environment

33 North Dearborn Street  
Chicago, Illinois 60602  
Tel. 312/578-9243, Fax: 312/578-9345

### M E M O R A N D U M

DATE: August 27, 1997

TO: Steve Skare, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Inorganic Data Quality Review for Resource Conservation and Recovery Act (RCRA) and Toxicity Characteristic Leaching Procedure (TCLP) Metals, Mosciano Plating, Chicago, Cook County, Illinois

REFERENCE: Project TDD S05-9708-004 Analytical TDD S05-9708-803  
Project PAN 7G0301RZXX Analytical PAN 7GAC01TAXX

The data quality assurance (QA) review of 14 plating shop wastes samples collected from the Mosciano Plating site is complete. The samples were collected on August 8, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). Sample S-2 was collected on August 13, 1997. Analyses for TCLP metals was performed on samples V-1 and WL-1 only. The samples were submitted to EIS Analytical Services, Inc., South Bend, Indiana. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 1311, 6010, and 7470.

#### Sample Identification

<u>START</u> <u>Identification No.</u>	<u>Laboratory</u> <u>Identification No.</u>
V-1	44582
V-2	44583
V-3	44584
V-4	45485
V-5	44586
V-6	44587
V-7	44588
V-8	44589
V-9	44590

<u>START</u> <u>Identification No.</u>	<u>Laboratory</u> <u>Identification No.</u>
D-1	44591
D-2	44592
SW-1	44595
WL-1	44596
S-2	44747

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on August 8, 1997, and analyzed between August 15 and 19, 1997. Analysis for mercury was performed on August 19, 1997. Sample S-2 was analyzed on August 20, 1997. Analyses for TCLP mercury was performed on August 19, 1997. This is within the 6-month (28 days for mercury) holding time limit.

II. Calibration:

- Initial Calibration: Acceptable

Recoveries for the initial calibration verification were within 90 to 110% (80 to 120% for mercury), as required. The correlation coefficient for mercury exceeded 0.995.

- Continuing Calibration: Acceptable

All analytes included in the continuing calibration verification standard were within 90 to 110% (80 to 120% for mercury), as required.

III. Blanks: Acceptable

Calibration and preparation blanks were analyzed with each analytical batch. No target analytes were detected in the blanks.

IV. Overall Assessment of Data For Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) Data Validation Procedures, Section 3.0, Metallic Inorganic Parameters. Based upon the information provided, the data are acceptable for use.



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Chicago, Illinois 60602  
Tel. 312/578-9243, Fax: 312/578-9345

### M E M O R A N D U M

DATE: September 29, 1997

TO: Steve Skare, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Organic Data Quality Review for Volatile Organic Compounds (VOCs), Mosciano Plating, Chicago, Cook County, Illinois

REFERENCE: Project TDD S05-9708-004 Analytical TDD S05-9708-803  
Project PAN 7G0301RZXX Analytical PAN 7GAC01TAXX

The data quality assurance (QA) review of two water and two drum waste samples collected from the Mosciano Plating site is complete. The samples were collected on August 8, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). (Sample S-2 was collected on August 13, 1997). The samples were submitted to EIS Analytical Services, Inc., South Bend, Indiana. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Method 8260.

#### Sample Identification

<u>START</u> <u>Identification No.</u>	<u>Laboratory</u> <u>Identification No.</u>
D-3	44593
D-4	44594
SW-1	44595
S-2	44747

Data Qualifications:

I. Sample Holding Time: Acceptable

Samples D-3, D-4, and SW-2 were collected on August 8, 1997, and analyzed on August 14, 1997. Sample S-2 was collected on August 13, 1997, and analyzed on August 18, 1997. This is within the 14-day holding time limit.

II. Gas Chromatography/Mass Spectrometry (GC/MS) Tuning: Acceptable

GC/MS tuning to meet ion abundance criteria using bromofluorobenzene (BFB) were acceptable and samples were analyzed within 12 hours of BFB tuning.

III. Calibrations:

• Initial Calibration: Qualified

A five-point initial calibration was performed prior to analysis. All average response factors were greater than 0.05 except acrolein and tetrahydrofuran; therefore, the nondetect values for these compounds have been flagged "R", as required. The percent relative standard deviations (%RSDs) between response factors were less than 30% for all detected target compounds.

• Continuing Calibration: Acceptable

The percent differences of the response factors were less than 25%, as required for detected target compounds.

IV. Blank: Acceptable

A method blank was analyzed with the samples. No target compounds or contaminants were detected in the blank.

V. Internal Standards: Acceptable

The areas of the internal standards in the samples were within -50% to +100% of the associated calibration check standard. The retention times of the internal standards were within the 30-second control limit.



VI. Compound Identification: Acceptable

The mass spectra and retention times of the detected compounds matched those of the standards.

VII. Additional QC Checks: Acceptable

The recoveries of the surrogates used in the samples and blank were within laboratory-established guidelines.

VIII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 5.0, VOAs By GC/MS analysis. Based upon the information provided, the data are acceptable for use, with the above-stated qualifications.

Data Qualifiers and Definitions:

R - The sample results are rejected (analyte may or may not be present) due to gross deficiencies in quality control criteria. Any reported value is unusable. Resampling and/or reanalysis is necessary for verification.



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### M E M O R A N D U M

DATE: September 29, 1997

TO: Steve Skare, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Organic Data Quality Review for Semivolatile Organic Compounds (SVOCs), Mosciano Plating, Chicago, Cook County, Illinois

REFERENCE: Project TDD S05-9708-004 Analytical TDD S05-9708-803  
Project PAN 7G0301RZXX Analytical PAN 7GAC01TAXX

The data quality assurance (QA) review of two water and two drum waste samples collected from the Mosciano Plating site is complete. The samples were collected on August 8, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). Sample S-2 was collected on August 13, 1997. The samples were submitted to EIS Analytical Services, Inc., South Bend, Indiana. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Method 8270.

#### Sample Identification

<u>START</u> <u>Identification No.</u>	<u>Laboratory</u> <u>Identification No.</u>
D-3	44593
D-4	44594
SW-1	44595
S-2	44747

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on August 8, 1997, extracted on August 13, 1997, and analyzed on August 14, 1997. Sample S-2 was collected on August 13, 1997, extracted on August 18, 1997, and analyzed on August 19, 1997. This is within the 14-day holding time limit, from collection to extraction, and 40-day limit from extraction to analysis.

II. Gas Chromatography/Mass Spectrometry (GC/MS) Tuning: Acceptable

GC/MS tuning to meet ion abundance criteria using decafluorotriphenylphosphine (DFTPP) were acceptable and samples were analyzed within 12 hours of DFTPP tuning.

III. Calibrations:

• Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. All average response factors were greater than 0.05. The percent relative standard deviations (%RSDs) between response factors were less than 30% for all detected target compounds.

• Continuing Calibration: Acceptable

The percent differences of the response factors were less than 25%, as required for detected target compounds.

IV. Blank: Acceptable

A method blank was analyzed with the samples. No target compounds or contaminants were detected in the blank.

V. Internal Standards: Acceptable

The areas of the internal standards in the samples were within -50% to +100% of the associated calibration check standard. The retention times of the internal standards were within the 30-second control limit.

VI. Compound Identification: Acceptable

The mass spectra and retention times of the detected compound matched those of the standards.

VII. Additional QC Checks: Acceptable

The recoveries of the surrogates used in the samples and blank were within laboratory-established guidelines.

VIII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 4.0, BNAs By GC/MS analysis. Based upon the information provided, the data are acceptable for use.



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Tel. 312/578-9243, Fax: 312/578-9345

### M E M O R A N D U M

DATE: August 27, 1997

TO: Steve Skare, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Data Quality Review for pH and Flash Point, Mosciano Plating, Chicago, Cook County, Illinois

REFERENCE: Project TDD S05-9708-004 Analytical TDD S05-9708-803  
Project PAN 7G0301RZXX Analytical PAN 7GAC01TAXX

The data quality assurance (QA) review of 16 plating shop waste samples collected from the Mosciano Plating site is complete. The samples were collected on August 8, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). Sample S-2 was collected on August 13, 1997. The samples were submitted to EIS Analytical Services, Inc., South Bend, Indiana. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 9045 and 4500 (for pH), and 1010 (for flash point).

#### Sample Identification

<u>START</u> <u>Identification No.</u>	<u>Laboratory</u> <u>Identification No.</u>
V-1	44582
V-2	44583
V-3	44584
V-4	45485
V-5	44586
V-6	44587
V-7	44588
V-8	44589
V-9	44590
D-1	44591
D-2	44592

<u>START</u> <u>Identification No.</u>	<u>Laboratory</u> <u>Identification No.</u>
D-3	44593
D-4	44594
SW-1	44595
WL-1	44596
S-2	44747

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on August 8, 1997, and analyzed for pH on August 13 and 14, 1997. Sample S-2 was analyzed on August 15, 1997. Samples D-3 and D-4 were analyzed for flash point on August 14, 1997. The Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) does not specify holding times for these parameters.

II. Calibration: Acceptable

The calibrations for flash point and pH were verified before sample analyses. The calibration for flash point was verified using xylene and the calibration for pH was verified following analyses of three standard solutions.

III. Overall Assessment of Data For Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the OSWER Data Validation Procedures, Section 9.0, Generic Data Validation Procedures. Based upon the information provided, the data are acceptable for use.



## ecology and environment, inc.

International Specialists in the Environment

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### M E M O R A N D U M

DATE: August 27, 1997

TO: Steve Skare, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Data Quality Review for Total and Amenable Cyanide, Mosciano Plating, Chicago, Cook County, Illinois

REFERENCE: Project TDD S05-9708-004 Analytical TDD S05-9708-803  
Project PAN 7G0301RZXX Analytical PAN 7GAC01TAXX

The data quality assurance (QA) review of six plating shop wastes samples collected from the Mosciano Plating site is complete. The samples were collected on August 8, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). Sample S-2 was collected on August 13, 1997. The samples were submitted to EIS Analytical Services, Inc., South Bend, Indiana. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 9012A and 7.3.3.2.

### Sample Identification

<u>START</u> <u>Identification No.</u>	<u>Laboratory</u> <u>Identification No.</u>
V-1	44582
V-8	44589
D-1	44591
SW-1	44595
WL-1	44596
S-2	44747

Mosciano Plating  
Project TDD S05-9708-004  
Analytical TDD S05-9708-803  
Total, Amenable Cyanide  
Page 2

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on August 8, 1997, and analyzed on August 13, 15, and 18, 1997. All analyses were performed within the 14-day holding time limit.

II. Calibration: Acceptable

The calibration of the procedure followed was based on standardization of the titration solutions. The calibration was found to be acceptable.

III. Overall Assessment of Data For Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Data Validation Procedures, Section 9.0, Generic Data Validation Procedures. Based upon the information provided, the data are acceptable for use.





Mr David Hendren  
Ecology & Environment, Inc.  
33 North Dearborn, Suite 900  
Chicago, IL 60602  
Tel No: 312-578-9243  
Fax No: 312-578-9345  
PO No:  
Project Name: Plating Area 2

Report Date: 9/3/97  
EIS Order No: 970800106  
EIS Sample No: 044582  
EIS Project No: 2009-1007-97

Client Sample ID: Vat V-1  
Date Collected: 8/8/97  
Date Received: 8/12/97  
Collected By: Client

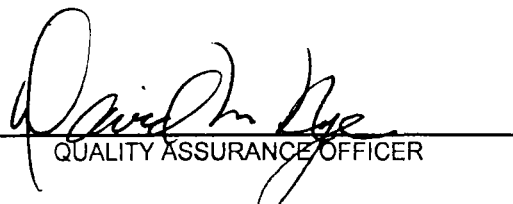
This report presents results of analysis for your sample(s) received under our Order No above. This Number is to be used in all inquiries concerning this report. The EIS Sample No above, as well as your Sample ID, refer to the first sample in a multi-sample submission

**DEFINITIONS:**

MDL = Method Detection Limit normally achieved in the absence of interferences or other matrix difficulties.

SDL = Sample Detection Limit achieved in your sample. If numerically greater than the MDL, dilutions were required in order to perform the analysis. If numerically less than the MDL, alternate techniques were employed.

CHAIN-OF-CUSTODY is enclosed if received with your sample submission.

  
QUALITY ASSURANCE OFFICER

  
LABORATORY DIRECTOR

The data in this report has been reviewed and complies with EIS Quality Control unless specifically addressed above.

## SAMPLE RESULTS

CLIENT SAMPLE ID: Vat V-1  
CLIENT PROJECT: Plating Area 2  
Date Collected: 8/8/97  
Date Received: 8/12/97

Page 2 of 49

Report Date: 9/3/97  
EIS Sample No: 044582  
EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Corrosivity	9.9	SU	1	1	ShaneD	8/19/97	9045C
Cyanide,Amenable to Chlorine	<27000	mg/kg(wet)	1000	5	SzkarlatM	8/13/97	9012 A
Cyanide,Total	227550	mg/kg(wet)	1000	5	SzkarlatM	8/13/97	9012 A
Moisture	41	%	0.01	0.01	SzkarlatM	8/15/97	160.3

## SAMPLE RESULTS

CLIENT SAMPLE ID: Vat V-1  
CLIENT PROJECT: Plating Area 2  
Date Collected: 8/8/97  
Date Received: 8/12/97

Page 3 of 49

Report Date: 9/3/97  
EIS Sample No: 044582  
EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>METALS</b>							
Arsenic, Total	<10.0	mg/kg(wet)	10	5	ClearN	8/18/97	6010
Barium, Total	13.6	mg/kg(wet)	1	1	ClearN	8/15/97	6010
Cadmium, Total	1.66	mg/kg(wet)	1	1	ClearN	8/15/97	6010
Chromium, Total	26.4	mg/kg(wet)	1	1	ClearN	8/15/97	6010
Lead, Total	48.7	mg/kg(wet)	5	5	ClearN	8/15/97	6010
Mercury, Total	<0.1	mg/kg(wet)	0.1	0.2	ShaneD	8/15/97	6010
Selenium, Total	<10.0	mg/kg(wet)	10	5	ClearN	8/15/97	6010
Silver, Total	11.7	mg/kg(wet)	1	1	ClearN	8/15/97	6010

# SAMPLE RESULTS

CLIENT SAMPLE ID: Vat V-1  
 CLIENT PROJECT: Plating Area 2  
 Date Collected: 8/8/97  
 Date Received: 8/12/97

Page 4 of 49

Report Date: 9/3/97  
 EIS Sample No: 044582  
 EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>TCLP METALS</b>							
Arsenic, TCLP	<2.0	mg/L	2	0.05	ClearN	8/18/97	6010
Barium, TCLP	0.20	mg/L	0.01	0.01	ClearN	8/15/97	6010
Cadmium, TCLP	0.03	mg/L	0.01	0.01	ClearN	8/15/97	6010
Chromium, TCLP	0.03	mg/L	0.01	0.01	ClearN	8/15/97	6010
Lead, TCLP	<0.05	mg/L	0.05	0.05	ClearN	8/15/97	6010
Mercury, TCLP	<0.004	mg/L	0.004	0.001	ShaneD	8/15/97	6010
	<2.0	mg/L	2	0.05	ClearN	8/15/97	6010
Silver, TCLP	0.67	mg/L	0.01	0.01	ClearN	8/15/97	6010

## SAMPLE RESULTS

CLIENT SAMPLE ID: Vat V-2  
CLIENT PROJECT: Plating Area 2  
Date Collected: 8/8/97  
Date Received: 8/12/97

Page 5 of 49

Report Date: 9/3/97  
EIS Sample No: 044583  
EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
pH	4.9	SU			LeiterP	8/13/97	9040 B

# SAMPLE RESULTS

CLIENT SAMPLE ID: Vat V-2  
 CLIENT PROJECT: Plating Area 2  
 Date Collected: 8/8/97  
 Date Received: 8/12/97

Page 6 of 49

Report Date: 9/3/97  
 EIS Sample No: 044583  
 EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>METALS</b>							
Arsenic, Total	8.26	mg/L	5	0.05	ClearN	8/18/97	6010
Barium, Total	<0.1	mg/L	0.1	0.01	ClearN	8/15/97	6010
Cadmium, Total	<1.0	mg/L	1	0.01	ClearN	8/18/97	6010
Chromium, Total	1.62	mg/L	0.1	0.01	ClearN	8/18/97	6010
Lead, Total	5.77	mg/L	0.5	0.05	ClearN	8/15/97	6010
Mercury, Total	<0.004	mg/L	0.004	0.0002	ShaneD	8/18/97	7470
Selenium, Total	<5.0	mg/L	5	0.05	ClearN	8/18/97	6010
Silver, Total	<1.0	mg/L	1	0.01	ClearN	8/18/97	6010

## SAMPLE RESULTS

CLIENT SAMPLE ID: Vat V-3  
CLIENT PROJECT: Plating Area 2  
Date Collected: 8/8/97  
Date Received: 8/12/97

Page 7 of 49

Report Date: 9/3/97  
EIS Sample No: 044584  
EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
pH	<0.5	SU			LeiterP	8/13/97	9040 B



## SAMPLE RESULTS

**CLIENT SAMPLE ID:** Vat V-3  
**CLIENT PROJECT:** Plating Area 2  
**Date Collected:** 8/8/97  
**Date Received:** 8/12/97

Page 8 of 49

**Report Date:** 9/3/97  
**EIS Sample No:** 044584  
**EIS Order No:** 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>METALS</b>							
Arsenic, Total	<2.0	mg/L	2	0.05	ClearN	8/18/97	6010
Barium, Total	1.18	mg/L	0.1	0.01	ClearN	8/15/97	6010
Cadmium, Total	2.92	mg/L	0.1	0.01	ClearN	8/15/97	6010
Chromium, Total	4.48	mg/L	0.1	0.01	ClearN	8/15/97	6010
Lead, Total	5.86	mg/L	0.5	0.05	ClearN	8/15/97	6010
Mercury, Total	<0.004	mg/L	0.004	0.0002	ShanaD	8/19/97	7470
Copper, Total	<2.0	mg/L	2	0.05	ClearN	8/15/97	6010
Silver, Total	<0.4	mg/L	0.4	0.01	ClearN	8/18/97	6010

## SAMPLE RESULTS

CLIENT SAMPLE ID: Vat V-4

Page 9 of 49

CLIENT PROJECT: Plating Area 2

Date Collected: 8/8/97

Report Date: 9/3/97

EIS Sample No: 044585

Date Received: 8/12/97

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
pH	1.9	SU			LeiterP	8/13/97	9040 B

# SAMPLE RESULTS

CLIENT SAMPLE ID: Vat V-4

Page 10 of 49

CLIENT PROJECT: Plating Area 2

Report Date: 9/3/97

Date Collected: 8/8/97

EIS Sample No: 044585

Date Received: 8/12/97

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>METALS</b>							
Arsenic, Total	<0.5	mg/L	0.5	0.05	ClearN	8/18/97	6010
Barium, Total	0.20	mg/L	0.1	0.01	ClearN	8/15/97	6010
Cadmium, Total	<0.1	mg/L	0.1	0.01	ClearN	8/15/97	6010
Chromium, Total	9.56	mg/L	0.1	0.01	ClearN	8/15/97	6010
Lead, Total	0.57	mg/L	0.5	0.05	ClearN	8/15/97	6010
Mercury, Total	<0.004	mg/L	0.004	0.0002	ShaneD	8/15/97	6010
Selenium, Total	<0.5	mg/L	0.5	0.05	ClearN	8/15/97	6010
Silver, Total	<0.1	mg/L	0.1	0.01	ClearN	8/18/97	6010

## SAMPLE RESULTS

Page 11 of 49

CLIENT SAMPLE ID: Vat-V-5  
CLIENT PROJECT: Plating Area 2  
Date Collected: 8/8/97  
Date Received: 8/12/97

Report Date: 9/3/97  
EIS Sample No: 044586  
EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
pH	<0.5	SU			LeiterP	8/13/97	9040 B

# SAMPLE RESULTS

CLIENT SAMPLE ID: Vat V-5  
 CLIENT PROJECT: Plating Area 2  
 Date Collected: 8/8/97  
 Date Received: 8/12/97

Page 12 of 49

Report Date: 9/3/97  
 EIS Sample No: 044586  
 EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>METALS</b>							
Arsenic, Total	<5.0	mg/L	5	0.05	ClearN	8/18/97	6010
Barium, Total	0.12	mg/L	0.1	0.01	ClearN	8/15/97	6010
Cadmium, Total	<0.1	mg/L	0.1	0.01	ClearN	8/15/97	6010
Chromium, Total	12.6	mg/L	0.1	0.01	ClearN	8/15/97	6010
Lead, Total	2.26	mg/L	0.5	0.05	ClearN	8/15/97	6010
Mercury, Total	0.045	mg/L	0.004	0.0002	ShaneD	8/18/97	7470
Selenium, Total	<5.0	mg/L	5	0.05	ClearN	8/15/97	6010
Silver, Total	<1.0	mg/L	1	0.01	ClearN	8/18/97	6010

## SAMPLE RESULTS

CLIENT SAMPLE ID: Vat V-6

CLIENT PROJECT: Plating Area 1

Date Collected: 8/8/97

Date Received: 8/12/97

Page 13 of 49

Report Date: 9/3/97

EIS Sample No: 044587

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
pH	4.9	SU			LeiterP	8/13/97	9040 B

# SAMPLE RESULTS

CLIENT SAMPLE ID: Vat V-6  
 CLIENT PROJECT: Plating Area 1  
 Date Collected: 8/8/97  
 Date Received: 8/12/97

Page 14 of 49

Report Date: 9/3/97  
 EIS Sample No: 044587  
 EIS Order No: 970800108

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>METALS</b>							
Arsenic, Total	7.10	mg/L	5	0.05	ClearN	8/18/97	6010
Barium, Total	0.11	mg/L	0.1	0.01	ClearN	8/15/97	6010
Cadmium, Total	<1.0	mg/L	1	0.01	ClearN	8/18/97	6010
Chromium, Total	0.18	mg/L	0.1	0.01	ClearN	8/18/97	6010
Lead, Total	5.75	mg/L	0.5	0.05	ClearN	8/15/97	6010
Mercury, Total	<0.004	mg/L	0.004	0.0002	ShaneD	8/18/97	7470
Selenium, Total	<5.0	mg/L	5	0.05	ClearN	8/18/97	6010
Silver, Total	<1.0	mg/L	1	0.01	ClearN	8/18/97	6010



## SAMPLE RESULTS

CLIENT SAMPLE ID: Vat V-7  
CLIENT PROJECT: Plating Area 1  
Date Collected: 8/8/97  
Date Received: 8/12/97

Page 15 of 49

Report Date: 9/3/97  
EIS Sample No: 044588  
EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
pH	<0.5	SU			LeiterP	8/13/97	9040 B

# SAMPLE RESULTS

CLIENT SAMPLE ID: Vat V-7  
 CLIENT PROJECT: Plating Area 1  
 Date Collected: 8/8/97  
 Date Received: 8/12/97

Page 16 of 49

Report Date: 9/3/97  
 EIS Sample No: 044588  
 EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>METALS</b>							
Arsenic, Total	<0.5	mg/L	0.5	0.05	ClearN	8/18/97	6010
Barium, Total	1.79	mg/L	0.1	0.01	ClearN	8/15/97	6010
Cadmium, Total	4.35	mg/L	0.1	0.01	ClearN	8/15/97	6010
Chromium, Total	72.0	mg/L	0.1	0.01	ClearN	8/15/97	6010
Lead, Total	137	mg/L	2.5	0.05	ClearN	8/15/97	6010
Mercury, Total	<0.004	mg/L	0.004	0.0002	ShaneD	8/10/97	7420
Selenium, Total	<0.5	mg/L	0.5	0.05	ClearN	8/15/97	6010
Silver, Total	<0.1	mg/L	0.1	0.01	ClearN	8/18/97	6010

## SAMPLE RESULTS

Page 17 of 49

CLIENT SAMPLE ID: Vat V-8

CLIENT PROJECT: Plating Area 1

Date Collected: 8/8/97

Date Received: 8/12/97

Report Date: 9/3/97

EIS Sample No: 044589

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Cyanide,Amenable to Chlorine	<3000	mg/L	1	0.005	SzkarlatM	8/15/97	9012 A
Cyanide,Total	47000	mg/L	1	0.005	SzkarlatM	8/15/97	9012 A
pH	10.0	SU			LeiterP	8/13/97	9040 B

# SAMPLE RESULTS

CLIENT SAMPLE ID: Vat V-8  
 CLIENT PROJECT: Plating Area 1  
 Date Collected: 8/8/97  
 Date Received: 8/12/97

Page 18 of 49

Report Date: 9/3/97  
 EIS Sample No: 044589  
 EIS Order No: 970600106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>METALS</b>							
Arsenic, Total	8.00	mg/L	5	0.05	ClearN	8/18/97	6010
Barium, Total	<0.1	mg/L	0.1	0.01	ClearN	8/15/97	6010
Cadmium, Total	<0.1	mg/L	0.1	0.01	ClearN	8/15/97	6010
Chromium, Total	<0.1	mg/L	0.1	0.01	ClearN	8/15/97	6010
Lead, Total	7.95	mg/L	5	0.05	ClearN	8/15/97	6010
Mercury, Total	<0.01	mg/L	0.01	0.0002	ShaneD	8/15/97	7470
Selenium, Total	<5.0	mg/L	5	0.05	ClearN	8/15/97	6010
Silver, Total	<1.0	mg/L	1	0.01	ClearN	8/18/97	6010

## SAMPLE RESULTS

CLIENT SAMPLE ID: Vat V-9  
CLIENT PROJECT: Plating Area 1  
Date Collected: 8/8/97  
Data Received: 8/12/97

Page 19 of 49

Report Date: 9/3/97  
EIS Sample No: 044590  
EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
pH	<0.5	SU			LeiterP	8/13/97	9040 B

## SAMPLE RESULTS

**CLIENT SAMPLE ID:** Vat V-9  
**CLIENT PROJECT:** Plating Area 1  
**Date Collected:** 8/8/97  
**Date Received:** 8/12/97

Page 20 of 49

**Report Date:** 9/3/97  
**EIS Sample No:** 044590  
**EIS Order No:** 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>METALS</b>							
Arsenic, Total	13.8	mg/L	12.5	0.05	ClearN	8/19/97	6010
Barium, Total	7.96	mg/L	0.1	0.01	ClearN	8/15/97	6010
Cadmium, Total	<2.5	mg/L	2.5	0.01	ClearN	8/19/97	6010
Chromium, Total	82200	mg/L	100	0.01	ClearN	8/15/97	6010
Lead, Total	35.4	mg/L	12.5	0.05	ClearN	8/15/97	6010
Mercury, Total	<0.004	mg/L	0.004	0.0002	ShariD	8/15/97	6010
Selenium, Total	<12.5	mg/L	12.5	0.05	ClearN	8/15/97	6010
Silver, Total	1.27	mg/L	0.1	0.01	ClearN	8/15/97	6010



## SAMPLE RESULTS

CLIENT SAMPLE ID: Drum D-1  
CLIENT PROJECT: Plating Area 2  
Date Collected: 8/8/97  
Date Received: 8/12/97

Page 21 of 49

Report Date: 9/3/97  
EIS Sample No: 044591  
EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Cyanide,Amenable to Chlorine	<3000	mg/L	1	0.005	SzkarlatM	8/15/97	9012 A
Cyanide,Total	35250	mg/L	1	0.005	SzkarlatM	8/15/97	9012 A
pH	10.0	SU			LeiterP	8/13/97	9040 B

# SAMPLE RESULTS

Page 22 of 49

CLIENT SAMPLE ID: Drum D-1  
 CLIENT PROJECT: Plating Area 2  
 Date Collected: 8/8/97  
 Date Received: 8/12/97

Report Date: 9/3/97  
 EIS Sample No: 044591  
 EIS Order No: 970600106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>METALS</b>							
Arsenic, Total	38.1	mg/L	5	0.05	ClearN	8/18/97	6010
Barium, Total	0.50	mg/L	0.1	0.01	ClearN	8/15/97	6010
Cadmium, Total	<0.1	mg/L	0.1	0.01	ClearN	8/15/97	6010
Chromium, Total	<1.0	mg/L	1	0.01	ClearN	8/15/97	6010
Lead, Total	<5.0	mg/L	5	0.05	ClearN	8/15/97	6010
Mercury, Total	<0.01	mg/L	0.01	0.0002	ShaneD	8/15/97	6010
Selenium, Total	<5.0	mg/L	5	0.05	ClearN	8/15/97	6010
Silver, Total	<1.0	mg/L	1	0.01	ClearN	8/18/97	6010

## SAMPLE RESULTS

CLIENT SAMPLE ID: Drum D-2  
CLIENT PROJECT: Plating Area 2  
Date Collected: 8/8/97  
Date Received: 8/12/97

Page 23 of 49

Report Date: 9/3/97  
EIS Sample No: 044592  
EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
pH	7.9	SU			LeiterP	8/14/97	9045 C

# SAMPLE RESULTS

Page 24 of 49

CLIENT SAMPLE ID: Drum D-2  
 CLIENT PROJECT: Plating Area 2  
 Date Collected: 8/8/97  
 Date Received: 8/12/97

Report Date: 9/3/97  
 EIS Sample No: 044592  
 EIS Order No: 970600106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>METALS</b>							
Arsenic, Total	<2.0	mg/L	50	1.25	ClearN	8/18/97	6010
Barium, Total	36.6	mg/L	6.25	0.25	ClearN	8/15/97	6010
Cadmium, Total	<0.25	mg/L	6.25	0.25	ClearN	8/15/97	6010
Chromium, Total	4.95	mg/L	2.5	0.25	ClearN	8/15/97	6010
Lead, Total	48.6	mg/L	31.25	1.25	ClearN	8/15/97	6010
Mercury, Total	0.023	mg/L	0.5	0.01	ShaneD	8/15/97	6010
Selenium, Total	<2.0	mg/L	50	1.25	ClearN	8/15/97	6010
Silver, Total	<0.25	mg/L	6.25	0.25	ClearN	8/15/97	6010

## SAMPLE RESULTS

CLIENT SAMPLE ID: Drum D-3  
CLIENT PROJECT: Laquer Room  
Date Collected: 8/8/97  
Date Received: 8/12/97

Page 25 of 49

Report Date: 9/3/97  
EIS Sample No: 044593  
EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Ignitability (Closed Cup)	68	Fahrenheit			SzkarlatM	8/14/97	1010
pH	3.2	SU			LeiterP	8/14/97	9045 C

# SAMPLE RESULTS

CLIENT SAMPLE ID: Drum D-3  
 CLIENT PROJECT: Laquer Room  
 Date Collected: 8/8/97  
 Date Received: 8/12/97

Page 26 of 49

Report Date: 9/3/97  
 EIS Sample No: 044593  
 EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>SEMIVOLATILE ORGANICS</b>							
Acenaphthene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Acenaphthylene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Aniline	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Anthracene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Benzidine	nd	mg/L	4400	2500	DavisW	8/14/97	8270 B
Benzo(a)anthracene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Benzo(b)fluoranthene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Benzo(g,h,i)perylene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Benzo(k)fluoranthene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Benzoic acid	nd	mg/L	4400	2500	DavisW	8/14/97	8270 B
Benzyl alcohol	nd	mg/L	1760	1000	DavisW	8/14/97	8270 B
Bis(2-chloroethoxy)methane	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Bis(2-chloroethyl)ether	nd	mg/L	880	500	DavisW	8/14/97	8270 B
is(2-chloroisopropyl)ether	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Bis(2-ethylhexyl)phthalate	1330	mg/L	880	500	DavisW	8/14/97	8270 B
Bromophenyl-phenylether (4)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Butyl benzyl phthalate	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Chloro-3-methylphenol (4)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Chloroaniline (4)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Chloronaphthalene (2)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Chlorophenol (2)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Chlorophenyl phenyl ether (4)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Chrysene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Di-n-butylphthalate	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Di-n-octylphthalate	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Dibenzo(a,h)anthracene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Dibenzofuran	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Dichlorobenzene (1,2)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Dichlorobenzene (1,3)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Dichlorobenzene (1,4)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Dichlorobenzidine (3,3')	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Dichlorophenol (2,4)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Diethyl phthalate	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Dimethyl phthalate	nd	mg/L	880	500	DavisW	8/14/97	8270 B
methylphenol (2,4)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Dimethylphenol (2,4)	nd	mg/L	4400	2500	DavisW	8/14/97	8270 B
Dinitrotoluene (2,4)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Dinitrotoluene (2,6)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Diphenylhydrazine (1,2)	nd	mg/L	880	500	DavisW	8/14/97	8270 B

# SAMPLE RESULTS

CLIENT SAMPLE ID: Drum D-3  
 CLIENT PROJECT: Laquer Room  
 Date Collected: 8/8/97  
 Date Received: 8/12/97

Page 27 of 49

Report Date: 9/3/97  
 EIS Sample No: 044593  
 EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Fluoranthene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Fluorene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Hexachlorobenzene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Hexachlorobutadiene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Hexachlorocyclopentadiene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Hexachloroethane	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Indeno(1,2,3-cd)pyrene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Isophthalic acid (2,4)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Methyl-4,6-dinitrophenol (2)	nd	mg/L	4400	2500	DavisW	8/14/97	8270 B
Methylnaphthalene (2)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Methylphenol (2)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Methylphenol (4)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Naphthalene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Nitroaniline (2)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Nitroaniline (3)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Nitroaniline (4)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Nitrobenzene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Nitrophenol (2)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Nitrophenol (4)	nd	mg/L	4400	2500	DavisW	8/14/97	8270 B
Nitroso-di-methylamine (normal)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Nitroso-di-n-propylamine (normal)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Nitroso-di-phenylamine (normal)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Pentachlorophenol	nd	mg/L	4400	2500	DavisW	8/14/97	8270 B
Phenanthrene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Phenol	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Pyrene	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Pyridine	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Trichlorobenzene (1,2,4)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Trichlorophenol (2,4,5)	nd	mg/L	880	500	DavisW	8/14/97	8270 B
Trichlorophenol (2,4,6)	nd	mg/L	880	500	DavisW	8/14/97	8270 B



# SAMPLE RESULTS

CLIENT SAMPLE ID: Drum D-3

CLIENT PROJECT: Laquer Room

Date Collected: 8/8/97

Date Received: 8/12/97

Page 28 of 49

Report Date: 9/3/97

EIS Sample No: 044593

EIS Order No: 970600106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>VOLATILE ORGANICS</b>							
Acetone	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Acrolein	nd R	mg/L	80000	1000	WilliamsJ	8/14/97	8260 A
Acrylonitrile	nd	mg/L	80000	1000	WilliamsJ	8/14/97	8260 A
Benzene	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Bromobenzene	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Bromochloromethane	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Bromodichloromethane	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Bromoform	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Bromomethane	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Butylbenzene (normal)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Butylbenzene (tert)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Carbon disulfide	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Carbon Tetrachloride	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Chlorobenzene	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Chloroethane	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Chloroethyl vinyl ether (2)	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Chloroform	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Chlorohexane (1)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Chloromethane	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Chlorotoluene (2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Chlorotoluene (4)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Cyclohexanone	nd	mg/L	400000	5000	WilliamsJ	8/14/97	8260 A
Dibromo-3-chloropropane (1,2)	nd	mg/L	120000	1500	WilliamsJ	8/14/97	8260 A
Dibromochloromethane	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Dibromoethane (1,2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Dibromomethane	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichloro-2-butene (1,4)	nd	mg/L	120000	1500	WilliamsJ	8/14/97	8260 A
Dichlorobenzene (1,2)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichlorobenzene (1,3)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichlorobenzene (1,4)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichlorodifluoromethane	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichloroethane (1,1)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Dichloroethane (1,2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Dichloroethene (1,1)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichloroethene (c-1,2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Dichloroethene (t-1,2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Dichlorofluoromethane	nd	mg/L	20000	250	WilliamsJ	8/14/97	8260 A
Dichloropropane (1,2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Dichloropropane (1,3)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichloropropane (2,2)	nd	mg/L	20000	250	WilliamsJ	8/14/97	8260 A

# SAMPLE RESULTS

CLIENT SAMPLE ID: Drum D-3

Page 29 of 49

CLIENT PROJECT: Laquer Room

Date Collected: 8/8/97

Date Received: 8/12/97

Report Date: 9/3/97

EIS Sample No: 044593

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Dichloropropene (1,1)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichloropropene (c-1,3)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichloropropene (t-1,3)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Diethyl ether	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Ethyl methacrylate	nd	mg/L	20000	250	WilliamsJ	8/14/97	8260 A
Ethylbenzene	28800	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Heptane (normal)	nd	mg/L	20000	250	WilliamsJ	8/14/97	8260 A
Hexane (normal)	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Hexanone (2-)	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Iodomethane	nd	mg/L	20000	250	WilliamsJ	8/14/97	8260 A
Isopropylbenzene	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Isopropyltoluene (para)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Methyl Ethyl Ketone (MEK)	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Methyl Isobutyl Ketone (MIBK)	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Methyl methacrylate	nd	mg/L	20000	250	WilliamsJ	8/14/97	8260 A
Methylbutylether (tert) (MTBE)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Methylene chloride	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Naphthalene	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Nitrobenzene	nd	mg/L	200000	2500	WilliamsJ	8/14/97	8260 A
Propylbenzene (normal)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Styrene	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Tetrachloroethane (1,1,1,2)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Tetrachloroethane (1,1,2,2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Tetrachloroethene	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Tetrahydrofuran	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Toluene	163000	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
TPH	nd	mg/L	800000	10000	WilliamsJ	8/14/97	8260 A
Trichlorobenzene (1,2,3)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Trichlorobenzene (1,2,4)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Trichloroethane (1,1,1)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Trichloroethane (1,1,2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Trichloroethene	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Trichlorofluoromethane	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Trichloropropane (1,2,3)	nd	mg/L	20000	250	WilliamsJ	8/14/97	8260 A
Trichlorotrifluoroethane	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Trimethylbenzene (1,2,4)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Trimethylbenzene (1,3,5)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Vinyl acetate	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Vinyl Chloride	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Xylene (ortho)	40600	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Xylenes (meta + para)	118000	mg/L	8000	100	WilliamsJ	8/14/97	8260 A

## SAMPLE RESULTS

CLIENT SAMPLE ID: Drum D-4  
CLIENT PROJECT: Laquer Room  
Date Collected: 8/8/97  
Date Received: 8/12/97

Page 30 of 49

Report Date: 9/3/97  
EIS Sample No: 044594  
EIS Order No: 970000106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Ignitability (Closed Cup)	66	Fahrenheit			SzkarlatM	8/14/97	1010
pH	3.4	SU			LeiterP	8/14/97	9045 C

# SAMPLE RESULTS

CLIENT SAMPLE ID: Drum D-4  
 CLIENT PROJECT: Laquer Room  
 Date Collected: 8/8/97  
 Date Received: 8/12/97

Page 31 of 49

Report Date: 9/3/97  
 EIS Sample No: 044594  
 EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>SEMIVOLATILE ORGANICS</b>							
Acenaphthene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Acenaphthylene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Aniline	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Anthracene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Benzidine	nd	mg/L	4325	2500	DavisW	8/14/97	8270 B
Benzo(a)anthracene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Benzo(b)fluoranthene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Benzo(ghi)perylene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Benzo(k)fluoranthene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Benzoic acid	nd	mg/L	4325	2500	DavisW	8/14/97	8270 B
Benzyl alcohol	nd	mg/L	1730	1000	DavisW	8/14/97	8270 B
Bis(2-chloroethoxy)methane	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Bis(2-chloroethyl)ether	nd	mg/L	865	500	DavisW	8/14/97	8270 B
is(2-chloroisopropyl)ether	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Bis(2-ethylhexyl)phthalate	15100	mg/L	865	500	DavisW	8/14/97	8270 B
Bromophenyl-phenylether (4)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Butyl benzyl phthalate	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Chloro-3-methylphenol (4)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Chloroaniline (4)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Chloronaphthalene (2)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Chlorophenol (2)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Chlorophenyl phenyl ether (4)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Chrysene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Di-n-butylphthalate	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Di-n-octylphthalate	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Dibenzo(a,h)anthracene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Dibenzofuran	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Dichlorobenzene (1,2)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Dichlorobenzene (1,3)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Dichlorobenzene (1,4)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Dichlorobenzidine (3,3')	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Dichlorophenol (2,4)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Diethyl phthalate	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Dimethyl phthalate	nd	mg/L	865	500	DavisW	8/14/97	8270 B
imethylphenol (2,4)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Dinitrophenol (2,4)	nd	mg/L	4325	2500	DavisW	8/14/97	8270 B
Dinitrotoluene (2,4)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Dinitrotoluene (2,6)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Diphenylhydrazine (1,2)	nd	mg/L	865	500	DavisW	8/14/97	8270 B

# SAMPLE RESULTS

CLIENT SAMPLE ID: Drum D-4

CLIENT PROJECT: Laquer Room

Date Collected: 8/8/97

Date Received: 8/12/97

Page 32 of 49

Report Date: 9/3/97

EIS Sample No: 044594

EIS Order No: 970600106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Fluoranthene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Fluorene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Hexachlorobenzene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Hexachlorobutadiene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Hexachlorocyclopentadiene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Hexachloroethane	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Indeno(1,2,3-cd)pyrene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
1-methyl-4-nitrophenol (2)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Methyl-4,6-dinitrophenol (2)	nd	mg/L	4325	2500	DavisW	8/14/97	8270 B
Methylnaphthalene (2)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Methylphenol (2)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Methylphenol (4)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Naphthalene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Nitroaniline (2)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Nitroaniline (3)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Nitroaniline (4)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Nitrobenzene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Nitrophenol (2)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Nitrophenol (4)	nd	mg/L	4325	2500	DavisW	8/14/97	8270 B
Nitroso-di-methylamine (normal)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Nitroso-di-n-propylamine (normal)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Nitroso-di-phenylamine (normal)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Pentachlorophenol	nd	mg/L	4325	2500	DavisW	8/14/97	8270 B
Phenanthrene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Phenol	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Pyrene	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Pyridine	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Trichlorobenzene (1,2,4)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Trichlorophenol (2,4,5)	nd	mg/L	865	500	DavisW	8/14/97	8270 B
Trichlorophenol (2,4,6)	nd	mg/L	865	500	DavisW	8/14/97	8270 B

# SAMPLE RESULTS

CLIENT SAMPLE ID: Drum D-4  
 CLIENT PROJECT: Laquer Room  
 Date Collected: 8/8/97  
 Date Received: 8/12/97

Page 33 of 49

Report Date: 9/3/97  
 EIS Sample No: 044594  
 EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>VOLATILE ORGANICS</b>							
Acetone	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Acrolein	nd R	mg/L	80000	1000	WilliamsJ	8/14/97	8260 A
Acrylonitrile	nd	mg/L	80000	1000	WilliamsJ	8/14/97	8260 A
Benzene	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Bromobenzene	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Bromochloromethane	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Bromodichloromethane	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Bromoform	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Bromomethane	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Butylbenzene (normal)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Butylbenzene (tert)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Carbon disulfide	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Carbon Tetrachloride	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Chlorobenzene	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Chloroethane	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Chloroethyl vinyl ether (2)	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Chloroform	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Chlorohexane (1)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Chloromethane	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Chlorotoluene (2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Chlorotoluene (4)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Cyclohexanone	nd	mg/L	400000	5000	WilliamsJ	8/14/97	8260 A
Dibromo-3-chloropropane (1,2)	nd	mg/L	120000	1500	WilliamsJ	8/14/97	8260 A
Dibromochloromethane	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Dibromoethane (1,2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Dibromomethane	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichloro-2-butene (1,4)	nd	mg/L	120000	1500	WilliamsJ	8/14/97	8260 A
Dichlorobenzene (1,2)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichlorobenzene (1,3)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichlorobenzene (1,4)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichlorodifluoromethane	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichloroethane (1,1)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Dichloroethane (1,2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Dichloroethene (1,1)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichloroethene (c-1,2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Dichloroethene (t-1,2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Dichlorofluoromethane	nd	mg/L	20000	250	WilliamsJ	8/14/97	8260 A
Dichloropropane (1,2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Dichloropropane (1,3)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichloropropane (2,2)	nd	mg/L	20000	250	WilliamsJ	8/14/97	8260 A

# SAMPLE RESULTS

Page 34 of 49

CLIENT SAMPLE ID: Drum D-4  
 CLIENT PROJECT: Laquer Room  
 Date Collected: 8/8/97  
 Date Received: 8/12/97

Report Date: 9/3/97  
 EIS Sample No: 044594  
 EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Dichloropropene (1,1)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichloropropene (c-1,3)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Dichloropropene (t-1,3)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Diethyl ether	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Ethyl methacrylate	nd	mg/L	20000	250	WilliamsJ	8/14/97	8260 A
Ethylbenzene	14900	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Heptane (normal)	nd	mg/L	20000	250	WilliamsJ	8/14/97	8260 A
Hexane (normal)	nd	mg/L	20000	250	WilliamsJ	8/14/97	8260 A
Hexanone (2-)	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Iodomethane	nd	mg/L	20000	250	WilliamsJ	8/14/97	8260 A
Isopropylbenzene	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Isopropyltoluene (para)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Methyl Ethyl Ketone (MEK)	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Methyl Isobutyl Ketone (MIBK)	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Methyl methacrylate	nd	mg/L	20000	250	WilliamsJ	8/14/97	8260 A
ethylbutylether (tert) (MTBE)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Methylene chloride	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Naphthalene	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Nitrobenzene	nd	mg/L	200000	2500	WilliamsJ	8/14/97	8260 A
Propylbenzene (normal)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Styrene	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Tetrachloroethane (1,1,1,2)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Tetrachloroethane (1,1,2,2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Tetrachloroethene	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Tetrahydrofuran	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Toluene	145000	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
TPH	nd	mg/L	800000	10000	WilliamsJ	8/14/97	8260 A
Trichlorobenzene (1,2,3)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Trichlorobenzene (1,2,4)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Trichloroethane (1,1,1)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Trichloroethane (1,1,2)	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Trichloroethene	nd	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Trichlorofluoromethane	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Trichloropropane (1,2,3)	nd	mg/L	20000	250	WilliamsJ	8/14/97	8260 A
Trichlorotrifluoroethane	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Trimethylbenzene (1,2,4)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Trimethylbenzene (1,3,5)	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Vinyl acetate	nd	mg/L	40000	500	WilliamsJ	8/14/97	8260 A
Vinyl Chloride	nd	mg/L	8000	100	WilliamsJ	8/14/97	8260 A
Xylene (ortho)	19000	mg/L	4000	50	WilliamsJ	8/14/97	8260 A
Xylenes (meta + para)	66900	mg/L	8000	100	WilliamsJ	8/14/97	8260 A



## SAMPLE RESULTS

CLIENT SAMPLE ID: SW-1

Page 35 of 49

CLIENT PROJECT: MWRDC Sample Well

Date Collected: 8/8/97

Report Date: 9/3/97

EIS Sample No: 044595

Date Received: 8/12/97

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
pH	9.9	SU			PovlockP	8/13/97	9040 B

## SAMPLE RESULTS

**CLIENT SAMPLE ID:** SW-1  
**CLIENT PROJECT:** MWRDC Sample Well  
**Date Collected:** 8/8/97  
**Date Received:** 8/12/97

Page 36 of 49

**Report Date:** 9/3/97  
**EIS Sample No:** 044595  
**EIS Order No:** 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>METALS</b>							
Arsenic, Total	<0.5	mg/L	0.5	0.05	ClearN	8/15/97	6010
Barium, Total	<0.1	mg/L	0.1	0.01	ClearN	8/15/97	6010
Cadmium, Total	<0.1	mg/L	0.1	0.01	ClearN	8/15/97	6010
Chromium, Total	<0.1	mg/L	0.1	0.01	ClearN	8/15/97	6010
Lead, Total	0.65	mg/L	0.5	0.05	ClearN	8/15/97	6010
Mercury, Total	<0.004	mg/L	0.004	0.0002	ShoreD	8/15/97	2710
Selenium, Total	<0.5	mg/L	0.5	0.05	ClearN	8/15/97	6010
Silver, Total	<0.1	mg/L	0.1	0.01	ClearN	8/15/97	6010

# SAMPLE RESULTS

CLIENT SAMPLE ID: SW-1

Page 37 of 49

CLIENT PROJECT: MWRDC Sample Well

Date Collected: 8/8/97

Date Received: 8/12/97

Report Date: 9/3/97

EIS Sample No: 044595

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>SEMIVOLATILE ORGANICS</b>							
Acenaphthene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Acenaphthylene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Aniline	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Anthracene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Benzidine	nd	µg/L	250	50	DavisW	8/14/97	8270 B
Benzo(a)anthracene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Benzo(b)fluoranthene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Benzo(g,h,i)perylene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Benzo(k)fluoranthene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Benzoic acid	1030	µg/L	250	50	DavisW	8/14/97	8270 B
Benzyl alcohol	nd	µg/L	100	20	DavisW	8/14/97	8270 B
Bis(2-chloroethoxy)methane	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Bis(2-chloroethyl)ether	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Bis(2-chloroisopropyl)ether	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Bis(2-ethylhexyl)phthalate	59	µg/L	50	10	DavisW	8/14/97	8270 B
Bromophenyl-phenylether (4)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Butyl benzyl phthalate	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Chloro-3-methylphenol (4)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Chloroaniline (4)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Chloronaphthalene (2)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Chlorophenol (2)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Chlorophenyl phenyl ether (4)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Chrysene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Di-n-butylphthalate	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Di-n-octylphthalate	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Dibenzo(a,h)anthracene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Dibenzofuran	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Dichlorobenzene (1,2)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Dichlorobenzene (1,3)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Dichlorobenzene (1,4)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Dichlorobenzidine (3,3')	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Dichlorophenol (2,4)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Diethyl phthalate	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Dimethyl phthalate	nd	µg/L	50	10	DavisW	8/14/97	8270 B
2-methylphenol (2,4)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
4-nitrophenol (2,4)	nd	µg/L	250	50	DavisW	8/14/97	8270 B
Dinitrotoluene (2,4)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Dinitrotoluene (2,6)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Diphenylhydrazine (1,2)	nd	µg/L	50	10	DavisW	8/14/97	8270 B

# SAMPLE RESULTS

CLIENT SAMPLE ID: SW-1

CLIENT PROJECT: MWRDC Sample Well

Date Collected: 8/8/97

Date Received: 8/12/97

Page 38 of 49

Report Date: 9/3/97

EIS Sample No: 044595

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Fluoranthene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Fluorene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Hexachlorobenzene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Hexachlorobutadiene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Hexachlorocyclopentadiene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Hexachloroethane	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Indeno(1,2,3-cd)pyrene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
1-methyl-4-nitrophenol (2)	nd	µg/L	250	50	DavisW	8/14/97	8270 B
Methylnaphthalene (2)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Methylphenol (2)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Methylphenol (4)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Naphthalene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Nitroaniline (2)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Nitroaniline (3)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Nitroaniline (4)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Nitrobenzene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Nitrophenol (2)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Nitrophenol (4)	nd	µg/L	250	50	DavisW	8/14/97	8270 B
Nitroso-di-methylamine (normal)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Nitroso-di-n-propylamine (normal)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Nitroso-di-phenylamine (normal)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Pentachlorophenol	nd	µg/L	250	50	DavisW	8/14/97	8270 B
Phenanthrene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Phenol	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Pyrene	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Pyridine	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Trichlorobenzene (1,2,4)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Trichlorophenol (2,4,5)	nd	µg/L	50	10	DavisW	8/14/97	8270 B
Trichlorophenol (2,4,6)	nd	µg/L	50	10	DavisW	8/14/97	8270 B

# SAMPLE RESULTS

CLIENT SAMPLE ID: SW-1

Page 39 of 49

CLIENT PROJECT: MWRDC Sample Well

Date Collected: 8/8/97

Date Received: 8/12/97

Report Date: 9/3/97

EIS Sample No: 044595

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>VOLATILE ORGANICS</b>							
Acetone	nd	µg/L	200	10	WilliamsJ	8/14/97	8260 A
Acrolein	nd R	µg/L	400	20	WilliamsJ	8/14/97	8260 A
Acrylonitrile	nd	µg/L	400	20	WilliamsJ	8/14/97	8260 A
Benzene	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Bromobenzene	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Bromochloromethane	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Bromodichloromethane	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Bromoform	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Bromomethane	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Butylbenzene (normal)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Butylbenzene (tert)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Carbon disulfide	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Carbon Tetrachloride	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Chlorobenzene	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Chloroethane	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Chloroethyl vinyl ether (2)	nd	µg/L	200	10	WilliamsJ	8/14/97	8260 A
Chloroform	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Chlorohexane (1)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Chloromethane	nd	µg/L	200	10	WilliamsJ	8/14/97	8260 A
Chlorotoluene (2)	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Chlorotoluene (4)	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Cyclohexanone	nd	µg/L	2000	100	WilliamsJ	8/14/97	8260 A
Dibromo-3-chloropropane (1,2)	nd	µg/L	600	30	WilliamsJ	8/14/97	8260 A
Dibromochloromethane	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Dibromoethane (1,2)	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Dibromomethane	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Dichloro-2-butene (1,4)	nd	µg/L	600	30	WilliamsJ	8/14/97	8260 A
Dichlorobenzene (1,2)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Dichlorobenzene (1,3)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Dichlorobenzene (1,4)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Dichlorodifluoromethane	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Dichloroethane (1,1)	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Dichloroethane (1,2)	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Dichloroethene (1,1)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Dichloroethene (c-1,2)	1030	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Dichloroethene (t-1,2)	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Dichlorofluoromethane	nd	µg/L	100	5	WilliamsJ	8/14/97	8260 A
Dichloropropane (1,2)	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Dichloropropane (1,3)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Dichloropropane (2,2)	nd	µg/L	100	5	WilliamsJ	8/14/97	8260 A

# SAMPLE RESULTS

CLIENT SAMPLE ID: SW-1

Page 40 of 49

CLIENT PROJECT: MWRDC Sample Well

Report Date: 9/3/97

Date Collected: 8/8/97

EIS Sample No: 044595

Date Received: 8/12/97

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Dichloropropene (1,1)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Dichloropropene (c-1,3)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Dichloropropene (t-1,3)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Diethyl ether	nd	µg/L	200	10	WilliamsJ	8/14/97	8260 A
Ethyl methacrylate	nd	µg/L	100	5	WilliamsJ	8/14/97	8260 A
Ethylbenzene	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Heptane (normal)	nd	µg/L	100	5	WilliamsJ	8/14/97	8260 A
Hexachlorocyclopentadiene	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Hexanone (2-)	nd	µg/L	200	10	WilliamsJ	8/14/97	8260 A
Iodomethane	nd	µg/L	100	5	WilliamsJ	8/14/97	8260 A
Isopropylbenzene	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Isopropyltoluene (para)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Methyl Ethyl Ketone (MEK)	nd	µg/L	200	10	WilliamsJ	8/14/97	8260 A
Methyl Isobutyl Ketone (MIBK)	nd	µg/L	200	10	WilliamsJ	8/14/97	8260 A
Methyl methacrylate	nd	µg/L	100	5	WilliamsJ	8/14/97	8260 A
Methylbutylether (tert) (MTBE)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
1,1,1-Trichloroethylene	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Naphthalene	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Propylbenzene (normal)	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
sec-Butylbenzene	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Styrene	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Tetrachloroethane (1,1,1,2)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Tetrachloroethane (1,1,2,2)	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Tetrachloroethene	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Tetrahydrofuran	nd	µg/L	200	10	WilliamsJ	8/14/97	8260 A
Toluene	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
TPH	nd	µg/L	4000	200	WilliamsJ	8/14/97	8260 A
Trichlorobenzene (1,2,3)	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Trichlorobenzene (1,2,4)	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Trichloroethane (1,1,1)	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Trichloroethane (1,1,2)	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Trichloroethene	1770	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Trichlorofluoromethane	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Trichloropropane (1,2,3)	nd	µg/L	100	5	WilliamsJ	8/14/97	8260 A
Trichlorotrifluoroethane	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Trimethylbenzene (1,2,4)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Trimethylbenzene (1,3,5)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
1,1-Dimethyl acetate	nd	µg/L	200	10	WilliamsJ	8/14/97	8260 A
Vinyl Chloride	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A
Xylene (ortho)	nd	µg/L	20	1	WilliamsJ	8/14/97	8260 A
Xylenes (meta + para)	nd	µg/L	40	2	WilliamsJ	8/14/97	8260 A

## SAMPLE RESULTS

CLIENT SAMPLE ID: WL-1

Page 41 of 49

CLIENT PROJECT: Hole in Outer Wall

Date Collected: 8/8/97

Report Date: 9/3/97

Date Received: 8/12/97

EIS Sample No: 044596

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Corrosivity	9.7	SU	1	1	ShaneD	8/19/97	9045C
Cyanide,Amenable to Chlorine	<10	mg/kg(wet)	5	5	SzkarlatM	8/13/97	9012 A
Cyanide,Total	14	mg/kg(wet)	5	5	SzkarlatM	8/13/97	9012 A
Moisture	5.7	%	0.01	0.01	SzkarlatM	8/13/97	1603



# SAMPLE RESULTS

CLIENT SAMPLE ID: WL-1

CLIENT PROJECT: Hole in Outer Wall

Date Collected: 8/8/97

Date Received: 8/12/97

Page 42 of 49

Report Date: 9/3/97

EIS Sample No: 044596

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>METALS</b>							
Arsenic, Total	<5.0	mg/kg(wet)	5	5	ClearN	8/18/97	6010
Barium, Total	50.6	mg/kg(wet)	1	1	ClearN	8/15/97	6010
Cadmium, Total	<1.0	mg/kg(wet)	1	1	ClearN	8/15/97	6010
Chromium, Total	45.9	mg/kg(wet)	1	1	ClearN	8/15/97	6010
Lead, Total	49.6	mg/kg(wet)	5	5	ClearN	8/15/97	6010
Mercury, Total	<0.1	mg/kg(wet)	0.1	0.2	ShaneD	8/15/97	7471
Selenium, Total	<5.0	mg/kg(wet)	5	5	ClearN	8/15/97	6010
Silver, Total	<1.0	mg/kg(wet)	1	1	ClearN	8/18/97	6010

# SAMPLE RESULTS

CLIENT SAMPLE ID: WL-1

CLIENT PROJECT: Hole in Outer Wall

Date Collected: 8/8/97

Date Received: 8/12/97

Page 43 of 49

Report Date: 9/3/97

EIS Sample No: 044596

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>TCLP METALS</b>							
Arsenic,TCLP	<0.05	mg/L	0.05	0.05	ClearN	8/15/97	6010
Barium,TCLP	0.08	mg/L	0.01	0.01	ClearN	8/15/97	6010
Cadmium,TCLP	<0.01	mg/L	0.01	0.01	ClearN	8/15/97	6010
Chromium,TCLP	0.32	mg/L	0.1	0.01	ClearN	8/15/97	6010
Lead,TCLP	<0.05	mg/L	0.05	0.05	ClearN	8/15/97	6010
Mercury,TCLP	<0.001	mg/L	0.001	0.001	ShaneD	8/19/97	7470
Selenium,TCLP	<0.05	mg/L	0.05	0.05	ClearN	8/15/97	6010
Silver,TCLP	<0.01	mg/L	0.01	0.01	ClearN	8/15/97	6010

## SAMPLE RESULTS

Page 44 of 49

CLIENT SAMPLE ID: S-2

CLIENT PROJECT: MWRDGC Sample Well

Date Collected: 8/13/97

Date Received: 8/12/97

Report Date: 9/3/97

EIS Sample No: 044747

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Cyanide,Amenable to Chlorine	<1	mg/L	0.005	0.005	SzkarlatM	8/18/97	9012 A
Cyanide,Total	9.0	mg/L	0.005	0.005	SzkarlatM	8/18/97	9012 A
pH	7.5	SU			LeiterP	8/15/97	9040 B

## SAMPLE RESULTS

Page 45 of 49

CLIENT SAMPLE ID: S-2

CLIENT PROJECT: MWRDGC Sample Well

Date Collected: 8/13/97

Date Received: 8/12/97

Report Date: 9/3/97

EIS Sample No: 044747

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>METALS</b>							
Arsenic, Total	0.29	mg/L	0.05	0.05	ClearN	8/20/97	6010
Barium, Total	0.09	mg/L	0.01	0.01	ClearN	8/20/97	6010
Cadmium, Total	<0.025	mg/L	0.025	0.01	ClearN	8/20/97	6010
Chromium, Total	0.26	mg/L	0.01	0.01	ClearN	8/20/97	6010
Lead, Total	<0.05	mg/L	0.05	0.05	ClearN	8/20/97	6010
Mercury, Total	<0.002	mg/L	0.002	0.0002	ShaneD	8/22/97	7470
Selenium, Total	0.06	mg/L	0.05	0.05	ClearN	8/20/97	6010
Silver, Total	0.73	mg/L	0.01	0.01	ClearN	8/20/97	6010

# SAMPLE RESULTS

CLIENT SAMPLE ID: S-2

CLIENT PROJECT: MWRDGC Sample Well

Date Collected: 8/13/97

Date Received: 8/12/97

Page 46 of 49

Report Date: 9/3/97

EIS Sample No: 044747

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>SEMIVOLATILE ORGANICS</b>							
Acenaphthene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Acenaphthylene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Aniline	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Anthracene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Benzidine	nd	µg/L	100	50	DavisW	8/19/97	8270 B
Benzo(a)anthracene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Benzo(b)fluoranthene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Benzo(ghi)perylene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Benzo(k)fluoranthene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Benzoic acid	nd	µg/L	100	50	DavisW	8/19/97	8270 B
Benzyl alcohol	nd	µg/L	40	20	DavisW	8/19/97	8270 B
Bis(2-chloroethoxy)methane	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Bis(2-chloroethyl)ether	nd	µg/L	20	10	DavisW	8/19/97	8270 B
s(2-chloroisopropyl)ether	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Bis(2-ethylhexyl)phthalate	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Bromophenyl-phenylether (4)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Butyl benzyl phthalate	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Chloro-3-methylphenol (4)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Chloroaniline (4)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Chloronaphthalene (2)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Chlorophenol (2)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Chlorophenyl phenyl ether (4)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Chrysene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Di-n-butylphthalate	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Di-n-octylphthalate	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Dibenzo(a,h)anthracene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Dibenzofuran	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Dichlorobenzene (1,2)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Dichlorobenzene (1,3)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Dichlorobenzene (1,4)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Dichlorobenzidine (3,3')	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Dichlorophenol (2,4)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Diethyl phthalate	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Dimethyl phthalate	nd	µg/L	20	10	DavisW	8/19/97	8270 B
methylphenol (2,4)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Dinitrophenol (2,4)	nd	µg/L	100	50	DavisW	8/19/97	8270 B
Dinitrotoluene (2,4)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Dinitrotoluene (2,6)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Diphenylhydrazine (1,2)	nd	µg/L	20	10	DavisW	8/19/97	8270 B

# SAMPLE RESULTS

CLIENT SAMPLE ID: S-2

CLIENT PROJECT: MWRDGC Sample Well

Date Collected: 8/13/97

Date Received: 8/12/97

Page 47 of 49

Report Date: 9/3/97

EIS Sample No: 044747

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Fluoranthene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Fluorene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Hexachlorobenzene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Hexachlorobutadiene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Hexachlorocyclopentadiene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Hexachlorobenzene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Indeno(1,2,3-cd)pyrene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Methyl 4,6-dinitrophenol (2)	nd	µg/L	100	50	DavisW	8/19/97	8270 B
Methylnaphthalene (2)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Methylphenol (2)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Methylphenol (4)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Naphthalene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Nitroaniline (2)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Nitroaniline (3)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Nitroaniline (4)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Nitrobenzene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Nitrophenol (2)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Nitrophenol (4)	nd	µg/L	100	50	DavisW	8/19/97	8270 B
Nitroso-di-methylamine (normal)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Nitroso-di-n-propylamine (normal)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Nitroso-di-phenylamine (normal)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Pentachlorophenol	nd	µg/L	100	50	DavisW	8/19/97	8270 B
Phenanthrene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Phenol	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Pyrene	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Pyridine	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Trichlorobenzene (1,2,4)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Trichlorophenol (2,4,5)	nd	µg/L	20	10	DavisW	8/19/97	8270 B
Trichlorophenol (2,4,6)	nd	µg/L	20	10	DavisW	8/19/97	8270 B

# SAMPLE RESULTS

CLIENT SAMPLE ID: S-2  
 CLIENT PROJECT: MWRDGC Sample Well  
 Date Collected: 8/13/97  
 Date Received: 8/12/97

Page 48 of 49

Report Date: 9/3/97  
 EIS Sample No: 044747  
 EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
<b>VOLATILE ORGANICS</b>							
Acetone	nd	µg/L	100	10	WilliamsJ	8/18/97	8260 A
Acrolein	nd R	µg/L	200	20	WilliamsJ	8/18/97	8260 A
Acrylonitrile	nd	µg/L	200	20	WilliamsJ	8/18/97	8260 A
Benzene	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Bromobenzene	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Bromochloromethane	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Bromodichloromethane	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Bromoform	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Bromomethane	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Butylbenzene (normal)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Butylbenzene (tert)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Carbon disulfide	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Carbon Tetrachloride	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Chlorobenzene	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Chloroethane	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Chloroethyl vinyl ether (2)	nd	µg/L	100	10	WilliamsJ	8/18/97	8260 A
Chloroform	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Chlorohexane (1)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Chloromethane	nd	µg/L	100	10	WilliamsJ	8/18/97	8260 A
Chlorotoluene (2)	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Chlorotoluene (4)	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Cyclohexanone	nd	µg/L	1000	100	WilliamsJ	8/18/97	8260 A
Dibromo-3-chloropropane (1,2)	nd	µg/L	300	30	WilliamsJ	8/18/97	8260 A
Dibromochloromethane	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Dibromoethane (1,2)	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Dibromomethane	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Dichloro-2-butene (1,4)	nd	µg/L	300	30	WilliamsJ	8/18/97	8260 A
Dichlorobenzene (1,2)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Dichlorobenzene (1,3)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Dichlorobenzene (1,4)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Dichlorodifluoromethane	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Dichloroethane (1,1)	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Dichloroethane (1,2)	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Dichloroethene (1,1)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Dichloroethene (c-1,2)	10	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Dichloroethene (t-1,2)	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Dichlorofluoromethane	nd	µg/L	50	5	WilliamsJ	8/18/97	8260 A
Dichloropropane (1,2)	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Dichloropropane (1,3)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Dichloropropane (2,2)	nd	µg/L	50	5	WilliamsJ	8/18/97	8260 A

# SAMPLE RESULTS

CLIENT SAMPLE ID: S-2

Page 49 of 49

CLIENT PROJECT: MWRDGC Sample Well

Report Date: 9/3/97

Date Collected: 8/13/97

EIS Sample No: 044747

Date Received: 8/12/97

EIS Order No: 970800106

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Dichloropropene (1,1)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Dichloropropene (c-1,3)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Dichloropropene (t-1,3)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Diethyl ether	nd	µg/L	100	10	WilliamsJ	8/18/97	8260 A
Ethyl methacrylate	nd	µg/L	50	5	WilliamsJ	8/18/97	8260 A
Ethylbenzene	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Heptane (normal)	nd	µg/L	50	5	WilliamsJ	8/18/97	8260 A
Hexane	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Hexanone (2-)	nd	µg/L	100	10	WilliamsJ	8/18/97	8260 A
Iodomethane	nd	µg/L	50	5	WilliamsJ	8/18/97	8260 A
Isopropylbenzene	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Isopropyltoluene (para)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Methyl Ethyl Ketone (MEK)	nd	µg/L	100	10	WilliamsJ	8/18/97	8260 A
Methyl Isobutyl Ketone (MIBK)	nd	µg/L	100	10	WilliamsJ	8/18/97	8260 A
Methyl methacrylate	nd	µg/L	50	5	WilliamsJ	8/18/97	8260 A
tert-Butyl ether (tert) (MTBE)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Methylene chloride	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Naphthalene	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Propylbenzene (normal)	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
sec-Butylbenzene	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Styrene	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Tetrachloroethane (1,1,1,2)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Tetrachloroethane (1,1,2,2)	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Tetrachloroethene	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Tetrahydrofuran	nd	µg/L	100	10	WilliamsJ	8/18/97	8260 A
Toluene	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
TPH	nd	µg/L	2000	200	WilliamsJ	8/18/97	8260 A
Trichlorobenzene (1,2,3)	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Trichlorobenzene (1,2,4)	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Trichloroethane (1,1,1)	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Trichloroethane (1,1,2)	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Trichloroethene	50	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Trichlorofluoromethane	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Trichloropropane (1,2,3)	nd	µg/L	50	5	WilliamsJ	8/18/97	8260 A
Trichlorotrifluoroethane	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Trimethylbenzene (1,2,4)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Trimethylbenzene (1,3,5)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Vinyl acetate	nd	µg/L	100	10	WilliamsJ	8/18/97	8260 A
Vinyl Chloride	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A
Xylene (ortho)	nd	µg/L	10	1	WilliamsJ	8/18/97	8260 A
Xylenes (meta + para)	nd	µg/L	20	2	WilliamsJ	8/18/97	8260 A



**Appendix C**  
**RCMS Cost Estimate**

APPENDIX C  
RCMS COST ESTIMATE  
AUGUST 25, 1997  
9 PAGES

REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION